

## Refine Search

### Search Results -

Terms	Documents
L9 and @pd > 20040926	1

Database:

US Pre-Grant Publication Full-Text Database  
 US Patents Full-Text Database  
 US OCR Full-Text Database  
 EPO Abstracts Database  
 JPO Abstracts Database  
 Derwent World Patents Index  
 IBM Technical Disclosure Bulletins

Search:

L10





### Search History

DATE: Sunday, May 15, 2005    [Printable Copy](#)    [Create Case](#)

<u>Set Name</u> side by side	<u>Query</u>	<u>Hit Count</u>	<u>Set Name</u> result set
<i>DB=USPT; PLUR=NO; OP=OR</i>			
<u>L10</u>	L9 and @pd > 20040926	1	<u>L10</u>
<u>L9</u>	L6 and (data ADJ flow)	10	<u>L9</u>
<u>L8</u>	L6 AND DFD	0	<u>L8</u>
<u>L7</u>	L6 and (data ADJ flow) OR DFD	448	<u>L7</u>
<u>L6</u>	(ER ADJ diagram) OR (ER-Diagram) OR (entity-Relation ADJ diagram) OR (entity ADJ relation ADJ diagram)	39	<u>L6</u>
<u>L5</u>	L4 and (object ADJ diagram).	1	<u>L5</u>
<u>L4</u>	L3 and meta	17	<u>L4</u>
<u>L3</u>	L2 and relationship	63	<u>L3</u>
<u>L2</u>	L1 and association	90	<u>L2</u>
<u>L1</u>	(717/103).ccls. or (717/108).ccls.	295	<u>L1</u>

END OF SEARCH HISTORY

# Refine Search

## Search Results -

Terms	Documents
L9 and @pd > 20040926	1

Database:

US Pre-Grant Publication Full-Text Database  
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US OCR Full-Text Database  
EPO Abstracts Database  
JPO Abstracts Database  
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IBM Technical Disclosure Bulletins

Search:

L10

Refine Search

Recall Text

Clear

Interrupt

## Search History

DATE: Sunday, May 15, 2005 [Printable Copy](#) [Create Case](#)

<u>Set</u> <u>Name</u> side by side	<u>Query</u>	<u>Hit</u> <u>Count</u>	<u>Set</u> <u>Name</u> result set
<i>DB=USPT; PLUR=NO; OP=OR</i>			
<u>L10</u>	L9 and @pd > 20040926	1	<u>L10</u>
<u>L9</u>	L6 and (data ADJ flow)	10	<u>L9</u>
<u>L8</u>	L6 AND DFD	0	<u>L8</u>
<u>L7</u>	L6 and (data ADJ flow) OR DFD	448	<u>L7</u>
<u>L6</u>	(ER ADJ diagram) OR (ER-Diagram) OR (entity-Relation ADJ diagram) OR (entity ADJ relation ADJ diagram)	39	<u>L6</u>
<u>L5</u>	L4 and (object ADJ diagram)	1	<u>L5</u>
<u>L4</u>	L3 and meta	17	<u>L4</u>
<u>L3</u>	L2 and relationship	63	<u>L3</u>
<u>L2</u>	L1 and association	90	<u>L2</u>
<u>L1</u>	(717/103).ccls. or (717/108).ccls.	295	<u>L1</u>

END OF SEARCH HISTORY

Terms	Documents
(ER ADJ diagram) OR (ER-Diagram) OR (entity-Relation ADJ diagram) OR (entity ADJ relation ADJ diagram)	39

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☐ 1. Document ID: US 6859523 B1

L6: Entry 1 of 39

File: USPT

Feb 22, 2005

US-PAT-NO: 6859523

DOCUMENT-IDENTIFIER: US 6859523 B1

TITLE: Universal task management system, method and product for automatically managing remote workers, including assessing the work product and workers

DATE-ISSUED: February 22, 2005

## INVENTOR-INFORMATION:

NAME	CITY	STATE	ZIP CODE	COUNTRY
Jilk; David J.	Broomfield	CO		
Kellner; Brian L.	Superior	CO		
Ganora; Victor	Louisville	CO		
Kotsines; Thomas A.	Denver	CO		

US-CL-CURRENT: 379/32.01; 379/265.01, 379/265.03, 379/265.05, 379/265.06,  
379/265.12, 379/32.02

## ABSTRACT:

A computer implemented method, a system, and a software product to automatically manage one or more human workers carrying out a process of manipulating source data provided to produce result data. The process including a set of one or more task steps each having an input and resulting in a task result. The computer implemented method includes receiving units of source data from a customer. For each unit of source data and each task step for the unit of source data, the method includes dispatching the task step and its corresponding input unit to a worker and, after the worker carries out the dispatched task step on the input unit, receiving the task result corresponding to the dispatched task step and input unit from the worker. Each worker is certified to have one or more task skills, wherein each task step requires a corresponding task skill, and wherein the dispatching of any task step occurs automatically substantially without human management to a worker who is certified to have the corresponding task skill of the task step. The method further includes assessing at least some of the task results of at least some of the task steps for at least some of the units of source data. A version of the method further includes generating the result data for the unit of source data from one or more of the task results corresponding to the task steps of the set and sending the result data for the unit of source data to the customer.

79 Claims, 11 Drawing figures

Exemplary Claim Number: 1

Number of Drawing Sheets: 9

Full	Title	Citation	Front	Review	Classification	Date	Reference	Claims	FIGS	Drawings
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☐ 2. Document ID: US 6836777 B2

L6: Entry 2 of 39

File: USPT

Dec 28, 2004

US-PAT-NO: 6836777

DOCUMENT-IDENTIFIER: US 6836777 B2

TITLE: System and method for constructing generic analytical database applications

DATE-ISSUED: December 28, 2004

INVENTOR-INFORMATION:

NAME	CITY	STATE	ZIP CODE	COUNTRY
Holle; Dan	Weybridge			GB

US-CL-CURRENT: 707/101; 707/100

ABSTRACT:

Disclosed is a system and method for constructing generic analytical database applications through the automated creation of metadata to establish an application structure controlling the availability and operability of individual applications.

5 Claims, 2 Drawing figures

Exemplary Claim Number: 1

Number of Drawing Sheets: 2

Full	Title	Citation	Front	Review	Classification	Date	Reference	Claims	FIGS	Drawings
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☐ 3. Document ID: US 6816867 B2

L6: Entry 3 of 39

File: USPT

Nov 9, 2004

US-PAT-NO: 6816867

DOCUMENT-IDENTIFIER: US 6816867 B2

TITLE: System, method, and user interfaces for mining of genomic data

DATE-ISSUED: November 9, 2004

INVENTOR-INFORMATION:

NAME	CITY	STATE	ZIP CODE	COUNTRY
Jevons; Luis	Sunnyvale	CA		
Awad; Timothy A.	San Francisco	CA		
Sheppy; Conrad G.	Redwood City	CA		
Ellis; Nicole	Monte Serenone	CA		

US-CL-CURRENT: 707/102; 435/5, 700/90, 707/104.1, 707/3, 707/5

ABSTRACT:

A data mining tool is described that includes a data structure populator that stores one or more first sets of data selected for querying into a first data structure. The tool also has a query builder that builds at least a first query based, at least in part, on one or more query parameters. Also included in the tool is a query manager that interrogates the first data structure with the first query. The one or more first sets of data are based, at least in part, on experiments using both synthesized probe arrays and spotted probe arrays.

29 Claims, 14 Drawing figures

Exemplary Claim Number: 1

Number of Drawing Sheets: 14

Full	Title	Citation	Front	Review	Classification	Date	Reference			Claims	Index	Drawings
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☐ 4. Document ID: US 6804679 B2

L6: Entry 4 of 39

File: USPT

Oct 12, 2004

US-PAT-NO: 6804679

DOCUMENT-IDENTIFIER: US 6804679 B2

TITLE: System, method, and user interfaces for managing genomic data

DATE-ISSUED: October 12, 2004

INVENTOR-INFORMATION:

NAME	CITY	STATE	ZIP CODE	COUNTRY
Jevons; Luis	Sunnyvale	CA		
Bernhart; Derek	Lafayette Hill	PA		
Sheppy; Conrad G.	Redwood City	CA		

US-CL-CURRENT: 707/102; 707/1, 707/10, 707/2, 707/3, 707/4

ABSTRACT:

A data manager is described for providing a publish database for access by data mining tools and other data processing software applications. The data manager includes a results-for-publication identifier that identifies synthesized probe array results and spotted probe array results for publishing. This identification may be based, at least in part, on user selections. The data in the publish database is organized in accordance with an integrated database schema. The data manager may also include an experimental results registration processor that registers the synthesized probe array results and the spotted probe array results for publishing. This registration may be based, at least in part, on user selections. For example, a user may select certain probe array results from a graphical user interface displaying a tree of files containing probe array results from multiple experiments with synthesized and/or spotted probe arrays.

31 Claims, 14 Drawing figures

Exemplary Claim Number: 1  
Number of Drawing Sheets: 14

Full	Title	Citation	Front	Review	Classification	Date	Reference	Claims	Page	Draw
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☐ 5. Document ID: US 6778971 B1

L6: Entry 5 of 39

File: USPT

Aug 17, 2004

US-PAT-NO: 6778971  
DOCUMENT-IDENTIFIER: US 6778971 B1

TITLE: Methods and apparatus for analyzing computer-based tasks to build task models

DATE-ISSUED: August 17, 2004

INVENTOR-INFORMATION:

NAME	CITY	STATE	ZIP CODE	COUNTRY
Altschuler; Steven J.	Redmond	WA		
Ingerman; David	New York	NY		
Jung; Edward K.	Bellevue	WA		
Ridgeway; Greg	Bellevue	WA		
Wu; Lani F.	Redmond	WA		

US-CL-CURRENT: 706/55; 700/29

ABSTRACT:

Methods and apparatus for analyzing tasks performed by computer users by (i) gathering usage data, (ii) converting logged usage data into a uniform format, (iii) determining or defining task boundaries, and (iv) determining a task analysis model by "clustering" similar tasks together. The task analysis model may be used to (i) help users complete a task (such help, for example, may be in the form of a gratuitous help function), and/or (ii) to target marketing information to users based on user inputs and the task analysis model. The present invention also provides a uniform semantic network for representing different types of objects in a uniform way.

100 Claims, 69 Drawing figures  
Exemplary Claim Number: 1  
Number of Drawing Sheets: 46

Full	Title	Citation	Front	Review	Classification	Date	Reference	Claims	Page	Draw
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☐ 6. Document ID: US 6754181 B1

L6: Entry 6 of 39

File: USPT

Jun 22, 2004

US-PAT-NO: 6754181

DOCUMENT-IDENTIFIER: US 6754181 B1

TITLE: System and method for a directory service supporting a hybrid communication system architecture

DATE-ISSUED: June 22, 2004

INVENTOR-INFORMATION:

NAME	CITY	STATE	ZIP CODE	COUNTRY
Elliott; Isaac K.	Colorado Springs	CO		
Krishnawswamy; Sridhar	Cedar Rapid	IA		

US-CL-CURRENT: 370/252; 370/352, 370/356

ABSTRACT:

Telephone calls, data and other multimedia information is routed through a hybrid network which includes transfer of information across the internet utilizing telephony routing information and internet protocol address information. A media order entry captures complete user profile information for a user. This profile information is utilized by the system throughout the media experience for routing, billing, monitoring, reporting and other media control functions. Users can manage more aspects of a network than previously possible, and control network activities from a central site. A directory service that supports a hybrid communication system architecture is provided for routing traffic over the hybrid network and the internet.

12 Claims, 191 Drawing figures

Exemplary Claim Number: 1

Number of Drawing Sheets: 133

Full	Title	Citation	Front	Review	Classification	Date	Reference	Abstract	Claims	Index	Drawings
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☐ 7. Document ID: US 6731625 B1

L6: Entry 7 of 39

File: USPT

May 4, 2004

US-PAT-NO: 6731625

DOCUMENT-IDENTIFIER: US 6731625 B1

TITLE: System, method and article of manufacture for a call back architecture in a hybrid network with support for internet telephony

DATE-ISSUED: May 4, 2004

INVENTOR-INFORMATION:

NAME	CITY	STATE	ZIP CODE	COUNTRY
Estep; Guido M.	McKenney	TX		
Litzenberger; Paul	Wilie	TX		
Orebaugh; Shannon R.	Herndon	VA		

US-CL-CURRENT: 370/352; 370/389, 370/392, 379/114.01, 379/90.01, 379/93.07



ABSTRACT:

A callback system is created utilizing a hybrid telecommunication system including a switched communication network and a packet transmission network. A call parameter database is stored in a memory. A call is received on the system. The call parameter database is accessed to determine at least one call parameter. The call is routed over the switched communication network and the packet transmission network based on the at least one call parameter. A plurality of service engines is provided, each configured to execute desired service logic utilizing expert system.

39 Claims, 188 Drawing figures  
Exemplary Claim Number: 1  
Number of Drawing Sheets: 187

Full	Title	Citation	Front	Review	Classification	Date	Reference			Claims	Index	Drawings
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☐ 8. Document ID: US 6684216 B1

L6: Entry 8 of 39

File: USPT

Jan 27, 2004

US-PAT-NO: 6684216  
DOCUMENT-IDENTIFIER: US 6684216 B1

TITLE: Method and computer system for providing input, analysis, and output capability for multidimensional information

DATE-ISSUED: January 27, 2004

INVENTOR-INFORMATION:

NAME	CITY	STATE	ZIP CODE	COUNTRY
Duliba; Katherine A.	Edison	NJ	08820	
Dorsey; Paul R.	Colonia	NJ		

US-CL-CURRENT: 707/102; 707/104.1

ABSTRACT:

A method includes creating and storing in various relational database tables: a biz metrix, by articulating variables that will appear on the metrix; biz metrix components; structure or relationships of the biz metrix; data elements that will appear on the metrix, including a text field storing a rule; defining the rule; creating and storing the metrix itself; metrix details; and potential types of subjects of the biz metrix.

13 Claims, 55 Drawing figures  
Exemplary Claim Number: 2  
Number of Drawing Sheets: 31

Full	Title	Citation	Front	Review	Classification	Date	Reference			Claims	Index	Drawings
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☐ 9. Document ID: US 6606613 B1

L6: Entry 9 of 39

File: USPT

Aug 12, 2003

US-PAT-NO: 6606613

DOCUMENT-IDENTIFIER: US 6606613 B1

TITLE: Methods and apparatus for using task models to help computer users complete tasks

DATE-ISSUED: August 12, 2003

INVENTOR-INFORMATION:

NAME	CITY	STATE	ZIP CODE	COUNTRY
Altschuler; Steven J.	Redmond	WA		
Ingerman; David	New York	NY		
Jung; Edward K.	Bellevue	WA		
Ridgeway; Greg	Bellevue	WA		
Wu; Lani F.	Redmond	WA		

US-CL-CURRENT: 706/21; 707/3, 707/6

ABSTRACT:

Methods and apparatus for analyzing tasks performed by computer users by (i) gathering usage data, (ii) converting logged usage data into a uniform format, (iii) determining or defining task boundaries, and (iv) determining a task analysis model by "clustering" similar tasks together. The task analysis model may be used to (i) help users complete a task (such help, for example, may be in the form of a gratuitous help function), and/or (ii) to target marketing information to users based on user inputs and the task analysis model. The present invention also provides a uniform semantic network for representing different types of objects in a uniform way.

57 Claims, 69 Drawing figures

Exemplary Claim Number: 1

Number of Drawing Sheets: 46

Full	Title	Citation	Front	Review	Classification	Date	Reference	Abstract	Claims	Index	Drawings
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☐ 10. Document ID: US 6564258 B1

L6: Entry 10 of 39

File: USPT

May 13, 2003

US-PAT-NO: 6564258

DOCUMENT-IDENTIFIER: US 6564258 B1

TITLE: Detection of network topology changes affecting trail routing consistency

DATE-ISSUED: May 13, 2003

INVENTOR-INFORMATION:

NAME	CITY	STATE	ZIP CODE	COUNTRY
Uniacke; Mark	Hertfordshire			GB

US-CL-CURRENT: 709/223; 370/351, 707/10, 709/201, 709/202, 709/203, 709/220,  
709/224, 710/220

ABSTRACT:

There is disclosed a method and apparatus for detection of client trails which may become unsupported due to reconfiguration of node elements within a network at a server layer, and a rerouting apparatus and method for proposing a set of alternative routes to support client trails during reconfiguration of a network at a physical layer. Data describing each trail, connection, node, link and other physical resource is maintained in a managed object database on a network controller. A trail detection algorithm investigates trail termination points corresponding to proposed deleted or created trails to see if those termination points support client trails at higher layers. If supported client trails are detected at higher layers, a routing algorithm is applied to find a set of alternative routes over which the client layer trails may be rerouted during network configuration at the physical or server layer.

31 Claims, 16 Drawing figures  
 Exemplary Claim Number: 1  
 Number of Drawing Sheets: 14

Full	Title	Citation	Front	Review	Classification	Date	Reference			Claims	FIGS	Drawings
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☐ 11. Document ID: US 6560592 B1

L6: Entry 11 of 39

File: USPT

May 6, 2003

US-PAT-NO: 6560592

DOCUMENT-IDENTIFIER: US 6560592 B1

TITLE: Multi-model computer database storage system with integrated rule engine

DATE-ISSUED: May 6, 2003

INVENTOR-INFORMATION:

NAME	CITY	STATE	ZIP CODE	COUNTRY
Reid; Jon D.	West Lafayette	IN		
Brugger; S. Terry	Brentwood	CA		

US-CL-CURRENT: 707/2; 706/2, 706/6

ABSTRACT:

In one form of the invention, a computer database storage system is disclosed, comprising a data storage medium adapted to store a plurality of pieces of information, at least one piece of data stored in the data storage medium, and at least one rule stored in the data storage medium, each said at least one rule comprising a premise, an action, wherein the action is performed if the premise is determined to be true, an alternate action, wherein the alternate action is

performed if the premise is determined to be false, and a trigger, wherein the trigger causes evaluation of the premise upon the occurrence of a predetermined event.

23 Claims, 23 Drawing figures  
Exemplary Claim Number: 1  
Number of Drawing Sheets: 18

Full	Title	Citation	Front	Review	Classification	Date	Reference	Abstract	Claims	Index	Drawings
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☐ 12. Document ID: US 6553383 B1

L6: Entry 12 of 39

File: USPT

Apr 22, 2003

US-PAT-NO: 6553383  
DOCUMENT-IDENTIFIER: US 6553383 B1

TITLE: Device for data analysis and organization

DATE-ISSUED: April 22, 2003

INVENTOR-INFORMATION:

NAME	CITY	STATE	ZIP CODE	COUNTRY
Martin; Guillaume	F-75016 Paris			FR

US-CL-CURRENT: 707/102

ABSTRACT:

The invention relates to a data processing device comprising a database management system (470). The management system (470) can cooperate with an operating system so as to allow the user the creation/input and/or the use of a database comprising at least one data table (475) which can be broken down into rows and columns. According to the invention, the device furthermore comprises: an autonomous meta-dictionary (510) for dynamically storing chosen information relating to the structure of each table of the database, and to the relationships between tables, an analysis means (530) capable of determining and of storing at least temporarily a representation of groups of interrelated columns, and a restructuring module (580, 590) capable of cooperating with the analysis means and the meta-dictionary with a view to establishing for the user a presentation of the database which takes account of at least one group of thus related columns.

19 Claims, 27 Drawing figures  
Exemplary Claim Number: 1  
Number of Drawing Sheets: 22

Full	Title	Citation	Front	Review	Classification	Date	Reference	Abstract	Claims	Index	Drawings
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☐ 13. Document ID: US 6539374 B2

L6: Entry 13 of 39

File: USPT

Mar 25, 2003

US-PAT-NO: 6539374

DOCUMENT-IDENTIFIER: US 6539374 B2

**\*\* See image for Certificate of Correction \*\***

TITLE: Methods, apparatus and data structures for providing a uniform representation of various types of information

DATE-ISSUED: March 25, 2003

INVENTOR-INFORMATION:

NAME	CITY	STATE	ZIP CODE	COUNTRY
Jung; Edward K.	Bellevue	WA		

US-CL-CURRENT: 707/4; 707/104.1

ABSTRACT:

Methods and apparatus for analyzing tasks performed by computer users by (i) gathering usage data, (ii) converting logged usage data into a uniform format, (iii) determining or defining task boundaries, and (iv) determining a task analysis model by "clustering" similar tasks together. The task analysis model may be used to (i) help users complete a task (such help, for example, may be in the form of a gratuitous help function), and/or (ii) to target marketing information to users based on user inputs and the task analysis model. The present invention also provides a uniform semantic network for representing different types of objects in a uniform way.

18 Claims, 69 Drawing figures

Exemplary Claim Number: 1

Number of Drawing Sheets: 46

Full	Title	Citation	Front	Review	Classification	Date	Reference	Abstract	Claims	FIGS	Drawings
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☐ 14. Document ID: US 6490581 B1

L6: Entry 14 of 39

File: USPT

Dec 3, 2002

US-PAT-NO: 6490581

DOCUMENT-IDENTIFIER: US 6490581 B1

**\*\* See image for Certificate of Correction \*\***

TITLE: System and method for providing an object-oriented interface to a relational database

DATE-ISSUED: December 3, 2002

INVENTOR-INFORMATION:

NAME	CITY	STATE	ZIP CODE	COUNTRY
Neshatfar; Shapour	Manalapan	NJ		
Warty; Pramod	Freehold	NJ		

US-CL-CURRENT: 707/4; 707/103R

**ABSTRACT:**

A method provides for an easily understood representation of the elements and relationships captured in a relational database. In accordance with the method an object model specification file and a database schema file are parsed to create a user-friendly graphical representation of object models and their relationship. The user is able perform a query by selecting one or more objects and setting constraints using the graphical representation of object models.

6 Claims, 10 Drawing figures  
Exemplary Claim Number: 1  
Number of Drawing Sheets: 9

Full	Title	Citation	Front	Review	Classification	Date	Reference			Claims	Index	Drawings
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☐ 15. Document ID: US 6476814 B1

L6: Entry 15 of 39

File: USPT

Nov 5, 2002

US-PAT-NO: 6476814  
DOCUMENT-IDENTIFIER: US 6476814 B1

TITLE: Display structure for representation of complex systems

DATE-ISSUED: November 5, 2002

## INVENTOR-INFORMATION:

NAME	CITY	STATE	ZIP CODE	COUNTRY
Garvey; Robert B.	Lake Lotawana	MO		

US-CL-CURRENT: 345/440**ABSTRACT:**

A multi-dimensional outline, a wordgraph, represents a subset of a directed graph with a given starting node where all edges related to a node in one direction, either incident out of that node or incident into that node appear indented below that node as in outlining represented by their terminal node or initial node respectively and all edges related in the other direction appear indented above that node represented by their initial node or terminal node, respectively, with the initial nodes and terminal nodes distinguished.

10 Claims, 2 Drawing figures  
Exemplary Claim Number: 1  
Number of Drawing Sheets: 2

Full	Title	Citation	Front	Review	Classification	Date	Reference			Claims	Index	Drawings
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☐ 16. Document ID: US 6442557 B1

L6: Entry 16 of 39

File: USPT

Aug 27, 2002

US-PAT-NO: 6442557  
DOCUMENT-IDENTIFIER: US 6442557 B1

TITLE: Evaluation of enterprise architecture model including relational database

DATE-ISSUED: August 27, 2002

INVENTOR-INFORMATION:

NAME	CITY	STATE	ZIP CODE	COUNTRY
Buteau; Brandon L.	Hollis	NH		
Moulton; Christine S.	Hollis	NH		

US-CL-CURRENT: 707/102; 705/7, 707/3

ABSTRACT:

A memory is provided for storing data for access by a database program being executed on a computer system for evaluating an enterprise architecture. A data structure is stored in the memory with the data structure including information resident in a database used by the database program. The data structure includes a work flow model, an information model; and a technology model. Each model includes a plurality of entities linking the models together. The computer system executes the database program for evaluating linkages between entities and how architectural changes to the enterprise affect the enterprise architecture by accessing the memory storing the data structure, and generates a result indicative of the linkages between entities.

30 Claims, 10 Drawing figures

Exemplary Claim Number: 1

Number of Drawing Sheets: 10

Full	Title	Citation	Front	Review	Classification	Date	Reference				Claims	Index	Drawings
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☐ 17. Document ID: US 6418448 B1

L6: Entry 17 of 39

File: USPT

Jul 9, 2002

US-PAT-NO: 6418448  
DOCUMENT-IDENTIFIER: US 6418448 B1

TITLE: METHOD AND APPARATUS FOR PROCESSING MARKUP LANGUAGE SPECIFICATIONS FOR DATA AND METADATA USED INSIDE MULTIPLE RELATED INTERNET DOCUMENTS TO NAVIGATE, QUERY AND MANIPULATE INFORMATION FROM A PLURALITY OF OBJECT RELATIONAL DATABASES OVER THE WEB

DATE-ISSUED: July 9, 2002

INVENTOR-INFORMATION:

NAME	CITY	STATE	ZIP CODE	COUNTRY
Sarkar; Shyam Sundar	San Mateo	CA	94403	

US-CL-CURRENT: 707/104.1; 707/1, 707/100, 707/101, 707/103R, 709/203, 709/229

**ABSTRACT:**

The present invention provides a system for navigation through multiple documents in Extensible Markup Language and Resource Description Framework to inspect data/metadata in order to either start a transaction on selected item(s) in separate thin client window(s) with persistent connectivity through Internet Inter ORB Protocol or implicitly trigger read-only queries in Structured Query Language (SQL) represented in Resource Description Framework against a unified virtual Database defined over multiple physical disparate object relational databases over the web. An implicitly generated query retrieves desired sets of properties and entities presented in documents of Extensible Markup Language and Resource Description Framework for further navigation. Container types in Resource Description Framework are mapped by this invention to record and table types in a normalized relational model where URIs locating elements in relational schema components over the web are stored as primary keys/foreign keys in normalized tables. Methods and operators on such web objects are defined as part of user-defined package definitions in object relational schema where object request brokers apply such methods or operators on result sets from relational operations anywhere on the web. This invention uniquely incorporates two distinct stages of SQL computations for a collaborative method of preparation, execution and resolution of an object SQL query over disparate locations of multiple object relational databases on the web.

15 Claims, 24 Drawing figures

Exemplary Claim Number: 1

Number of Drawing Sheets: 24

Full	Title	Citation	Front	Review	Classification	Date	Reference	Fig. 1	Fig. 2	Fig. 3	Fig. 4	Fig. 5	Fig. 6	Fig. 7	Fig. 8	Fig. 9	Fig. 10	Fig. 11	Fig. 12	Fig. 13	Fig. 14	Fig. 15	Fig. 16	Fig. 17	Fig. 18	Fig. 19	Fig. 20	Fig. 21	Fig. 22	Fig. 23	Fig. 24	Fig. 25	Fig. 26	Fig. 27	Fig. 28	Fig. 29	Fig. 30	Fig. 31	Fig. 32	Fig. 33	Fig. 34	Fig. 35	Fig. 36	Fig. 37	Fig. 38	Fig. 39	Fig. 40	Fig. 41	Fig. 42	Fig. 43	Fig. 44	Fig. 45	Fig. 46	Fig. 47	Fig. 48	Fig. 49	Fig. 50	Fig. 51	Fig. 52	Fig. 53	Fig. 54	Fig. 55	Fig. 56	Fig. 57	Fig. 58	Fig. 59	Fig. 60	Fig. 61	Fig. 62	Fig. 63	Fig. 64	Fig. 65	Fig. 66	Fig. 67	Fig. 68	Fig. 69	Fig. 70	Fig. 71	Fig. 72	Fig. 73	Fig. 74	Fig. 75	Fig. 76	Fig. 77	Fig. 78	Fig. 79	Fig. 80	Fig. 81	Fig. 82	Fig. 83	Fig. 84	Fig. 85	Fig. 86	Fig. 87	Fig. 88	Fig. 89	Fig. 90	Fig. 91	Fig. 92	Fig. 93	Fig. 94	Fig. 95	Fig. 96	Fig. 97	Fig. 98	Fig. 99	Fig. 100	Fig. 101	Fig. 102	Fig. 103	Fig. 104	Fig. 105	Fig. 106	Fig. 107	Fig. 108	Fig. 109	Fig. 110	Fig. 111	Fig. 112	Fig. 113	Fig. 114	Fig. 115	Fig. 116	Fig. 117	Fig. 118	Fig. 119	Fig. 120	Fig. 121	Fig. 122	Fig. 123	Fig. 124	Fig. 125	Fig. 126	Fig. 127	Fig. 128	Fig. 129	Fig. 130	Fig. 131	Fig. 132	Fig. 133	Fig. 134	Fig. 135	Fig. 136	Fig. 137	Fig. 138	Fig. 139	Fig. 140	Fig. 141	Fig. 142	Fig. 143	Fig. 144	Fig. 145	Fig. 146	Fig. 147	Fig. 148	Fig. 149	Fig. 150	Fig. 151	Fig. 152	Fig. 153	Fig. 154	Fig. 155	Fig. 156	Fig. 157	Fig. 158	Fig. 159	Fig. 160	Fig. 161	Fig. 162	Fig. 163	Fig. 164	Fig. 165	Fig. 166	Fig. 167	Fig. 168	Fig. 169	Fig. 170	Fig. 171	Fig. 172	Fig. 173	Fig. 174	Fig. 175	Fig. 176	Fig. 177	Fig. 178	Fig. 179	Fig. 180	Fig. 181	Fig. 182	Fig. 183	Fig. 184	Fig. 185	Fig. 186	Fig. 187	Fig. 188	Fig. 189	Fig. 190	Fig. 191	Fig. 192	Fig. 193	Fig. 194	Fig. 195	Fig. 196	Fig. 197	Fig. 198	Fig. 199	Fig. 200	Fig. 201	Fig. 202	Fig. 203	Fig. 204	Fig. 205	Fig. 206	Fig. 207	Fig. 208	Fig. 209	Fig. 210	Fig. 211	Fig. 212	Fig. 213	Fig. 214	Fig. 215	Fig. 216	Fig. 217	Fig. 218	Fig. 219	Fig. 220	Fig. 221	Fig. 222	Fig. 223	Fig. 224	Fig. 225	Fig. 226	Fig. 227	Fig. 228	Fig. 229	Fig. 230	Fig. 231	Fig. 232	Fig. 233	Fig. 234	Fig. 235	Fig. 236	Fig. 237	Fig. 238	Fig. 239	Fig. 240	Fig. 241	Fig. 242	Fig. 243	Fig. 244	Fig. 245	Fig. 246	Fig. 247	Fig. 248	Fig. 249	Fig. 250	Fig. 251	Fig. 252	Fig. 253	Fig. 254	Fig. 255	Fig. 256	Fig. 257	Fig. 258	Fig. 259	Fig. 260	Fig. 261	Fig. 262	Fig. 263	Fig. 264	Fig. 265	Fig. 266	Fig. 267	Fig. 268	Fig. 269	Fig. 270	Fig. 271	Fig. 272	Fig. 273	Fig. 274	Fig. 275	Fig. 276	Fig. 277	Fig. 278	Fig. 279	Fig. 280	Fig. 281	Fig. 282	Fig. 283	Fig. 284	Fig. 285	Fig. 286	Fig. 287	Fig. 288	Fig. 289	Fig. 290	Fig. 291	Fig. 292	Fig. 293	Fig. 294	Fig. 295	Fig. 296	Fig. 297	Fig. 298	Fig. 299	Fig. 300	Fig. 301	Fig. 302	Fig. 303	Fig. 304	Fig. 305	Fig. 306	Fig. 307	Fig. 308	Fig. 309	Fig. 310	Fig. 311	Fig. 312	Fig. 313	Fig. 314	Fig. 315	Fig. 316	Fig. 317	Fig. 318	Fig. 319	Fig. 320	Fig. 321	Fig. 322	Fig. 323	Fig. 324	Fig. 325	Fig. 326	Fig. 327	Fig. 328	Fig. 329	Fig. 330	Fig. 331	Fig. 332	Fig. 333	Fig. 334	Fig. 335	Fig. 336	Fig. 337	Fig. 338	Fig. 339	Fig. 340	Fig. 341	Fig. 342	Fig. 343	Fig. 344	Fig. 345	Fig. 346	Fig. 347	Fig. 348	Fig. 349	Fig. 350	Fig. 351	Fig. 352	Fig. 353	Fig. 354	Fig. 355	Fig. 356	Fig. 357	Fig. 358	Fig. 359	Fig. 360	Fig. 361	Fig. 362	Fig. 363	Fig. 364	Fig. 365	Fig. 366	Fig. 367	Fig. 368	Fig. 369	Fig. 370	Fig. 371	Fig. 372	Fig. 373	Fig. 374	Fig. 375	Fig. 376	Fig. 377	Fig. 378	Fig. 379	Fig. 380	Fig. 381	Fig. 382	Fig. 383	Fig. 384	Fig. 385	Fig. 386	Fig. 387	Fig. 388	Fig. 389	Fig. 390	Fig. 391	Fig. 392	Fig. 393	Fig. 394	Fig. 395	Fig. 396	Fig. 397	Fig. 398	Fig. 399	Fig. 400	Fig. 401	Fig. 402	Fig. 403	Fig. 404	Fig. 405	Fig. 406	Fig. 407	Fig. 408	Fig. 409	Fig. 410	Fig. 411	Fig. 412	Fig. 413	Fig. 414	Fig. 415	Fig. 416	Fig. 417	Fig. 418	Fig. 419	Fig. 420	Fig. 421	Fig. 422	Fig. 423	Fig. 424	Fig. 425	Fig. 426	Fig. 427	Fig. 428	Fig. 429	Fig. 430	Fig. 431	Fig. 432	Fig. 433	Fig. 434	Fig. 435	Fig. 436	Fig. 437	Fig. 438	Fig. 439	Fig. 440	Fig. 441	Fig. 442	Fig. 443	Fig. 444	Fig. 445	Fig. 446	Fig. 447	Fig. 448	Fig. 449	Fig. 450	Fig. 451	Fig. 452	Fig. 453	Fig. 454	Fig. 455	Fig. 456	Fig. 457	Fig. 458	Fig. 459	Fig. 460	Fig. 461	Fig. 462	Fig. 463	Fig. 464	Fig. 465	Fig. 466	Fig. 467	Fig. 468	Fig. 469	Fig. 470	Fig. 471	Fig. 472	Fig. 473	Fig. 474	Fig. 475	Fig. 476	Fig. 477	Fig. 478	Fig. 479	Fig. 480	Fig. 481	Fig. 482	Fig. 483	Fig. 484	Fig. 485	Fig. 486	Fig. 487	Fig. 488	Fig. 489	Fig. 490	Fig. 491	Fig. 492	Fig. 493	Fig. 494	Fig. 495	Fig. 496	Fig. 497	Fig. 498	Fig. 499	Fig. 500	Fig. 501	Fig. 502	Fig. 503	Fig. 504	Fig. 505	Fig. 506	Fig. 507	Fig. 508	Fig. 509	Fig. 510	Fig. 511	Fig. 512	Fig. 513	Fig. 514	Fig. 515	Fig. 516	Fig. 517	Fig. 518	Fig. 519	Fig. 520	Fig. 521	Fig. 522	Fig. 523	Fig. 524	Fig. 525	Fig. 526	Fig. 527	Fig. 528	Fig. 529	Fig. 530	Fig. 531	Fig. 532	Fig. 533	Fig. 534	Fig. 535	Fig. 536	Fig. 537	Fig. 538	Fig. 539	Fig. 540	Fig. 541	Fig. 542	Fig. 543	Fig. 544	Fig. 545	Fig. 546	Fig. 547	Fig. 548	Fig. 549	Fig. 550	Fig. 551	Fig. 552	Fig. 553	Fig. 554	Fig. 555	Fig. 556	Fig. 557	Fig. 558	Fig. 559	Fig. 560	Fig. 561	Fig. 562	Fig. 563	Fig. 564	Fig. 565	Fig. 566	Fig. 567	Fig. 568	Fig. 569	Fig. 570	Fig. 571	Fig. 572	Fig. 573	Fig. 574	Fig. 575	Fig. 576	Fig. 577	Fig. 578	Fig. 579	Fig. 580	Fig. 581	Fig. 582	Fig. 583	Fig. 584	Fig. 585	Fig. 586	Fig. 587	Fig. 588	Fig. 589	Fig. 590	Fig. 591	Fig. 592	Fig. 593	Fig. 594	Fig. 595	Fig. 596	Fig. 597	Fig. 598	Fig. 599	Fig. 600	Fig. 601	Fig. 602	Fig. 603	Fig. 604	Fig. 605	Fig. 606	Fig. 607	Fig. 608	Fig. 609	Fig. 610	Fig. 611	Fig. 612	Fig. 613	Fig. 614	Fig. 615	Fig. 616	Fig. 617	Fig. 618	Fig. 619	Fig. 620	Fig. 621	Fig. 622	Fig. 623	Fig. 624	Fig. 625	Fig. 626	Fig. 627	Fig. 628	Fig. 629	Fig. 630	Fig. 631	Fig. 632	Fig. 633	Fig. 634	Fig. 635	Fig. 636	Fig. 637	Fig. 638	Fig. 639	Fig. 640	Fig. 641	Fig. 642	Fig. 643	Fig. 644	Fig. 645	Fig. 646	Fig. 647	Fig. 648	Fig. 649	Fig. 650	Fig. 651	Fig. 652	Fig. 653	Fig. 654	Fig. 655	Fig. 656	Fig. 657	Fig. 658	Fig. 659	Fig. 660	Fig. 661	Fig. 662	Fig. 663	Fig. 664	Fig. 665	Fig. 666	Fig. 667	Fig. 668	Fig. 669	Fig. 670	Fig. 671	Fig. 672	Fig. 673	Fig. 674	Fig. 675	Fig. 676	Fig. 677	Fig. 678	Fig. 679	Fig. 680	Fig. 681	Fig. 682	Fig. 683	Fig. 684	Fig. 685	Fig. 686	Fig. 687	Fig. 688	Fig. 689	Fig. 690	Fig. 691	Fig. 692	Fig. 693	Fig. 694	Fig. 695	Fig. 696	Fig. 697	Fig. 698	Fig. 699	Fig. 700	Fig. 701	Fig. 702	Fig. 703	Fig. 704	Fig. 705	Fig. 706	Fig. 707	Fig. 708	Fig. 709	Fig. 710	Fig. 711	Fig. 712	Fig. 713	Fig. 714	Fig. 715	Fig. 716	Fig. 717	Fig. 718	Fig. 719	Fig. 720	Fig. 721	Fig. 722	Fig. 723	Fig. 724	Fig. 725	Fig. 726	Fig. 727	Fig. 728	Fig. 729	Fig. 730	Fig. 731	Fig. 732	Fig. 733	Fig. 734	Fig. 735	Fig. 736	Fig. 737	Fig. 738	Fig. 739	Fig. 740	Fig. 741	Fig. 742	Fig. 743	Fig. 744	Fig. 745	Fig. 746	Fig. 747	Fig. 748	Fig. 749	Fig. 750	Fig. 751	Fig. 752	Fig. 753	Fig. 754	Fig. 755	Fig. 756	Fig. 757	Fig. 758	Fig. 759	Fig. 760	Fig. 761	Fig. 762	Fig. 763	Fig. 764	Fig. 765	Fig. 766	Fig. 767	Fig. 768	Fig. 769	Fig. 770	Fig. 771	Fig. 772	Fig. 773	Fig. 774	Fig. 775	Fig. 776	Fig. 777	Fig. 778	Fig. 779	Fig. 780	Fig. 781	Fig. 782	Fig. 783	Fig. 784	Fig. 785	Fig. 786	Fig. 787	Fig. 788	Fig. 789	Fig. 790	Fig. 791	Fig. 792	Fig. 793	Fig. 794	Fig. 795	Fig. 796	Fig. 797	Fig. 798	Fig. 799	Fig. 800	Fig. 801	Fig. 802	Fig. 803	Fig. 804	Fig. 805	Fig. 806	Fig. 807	Fig. 808	Fig. 809	Fig. 810	Fig. 811	Fig. 812	Fig. 813	Fig. 814	Fig. 815	Fig. 816	Fig. 817	Fig. 818	Fig. 819	Fig. 820	Fig. 821	Fig. 822	Fig. 823	Fig. 824	Fig. 825	Fig. 826	Fig. 827	Fig. 828	Fig. 829	Fig. 830	Fig. 831	Fig. 832	Fig. 833	Fig. 834	Fig. 835	Fig. 836	Fig. 837	Fig. 838	Fig. 839	Fig. 840	Fig. 841	Fig. 842	Fig. 843	Fig. 844	Fig. 845	Fig. 846	Fig. 847	Fig. 848	Fig. 849	Fig. 850	Fig. 851	Fig. 852	Fig. 853	Fig. 854	Fig. 855	Fig. 856	Fig. 857	Fig. 858	Fig. 859	Fig. 860	Fig. 861	Fig. 862	Fig. 863	Fig. 864	Fig. 865	Fig. 866	Fig. 867	Fig. 868	Fig. 869	Fig. 870	Fig. 871	Fig. 872	Fig. 873	Fig. 874	Fig. 875	Fig. 876	Fig. 877	Fig. 878	Fig. 879	Fig. 880	Fig. 881	Fig. 882	Fig. 883	Fig. 884	Fig. 885	Fig. 886	Fig. 887	Fig. 888	Fig. 889	Fig. 890	Fig. 891	Fig. 892	Fig. 893	Fig. 894	Fig. 895	Fig. 896	Fig. 897	Fig. 898	Fig. 899	Fig. 900	Fig. 901	Fig. 902	Fig. 903	Fig. 904	Fig. 905	Fig. 906	Fig. 907	Fig. 908	Fig. 909	Fig. 910	Fig. 911	Fig. 912	Fig. 913	Fig. 914	Fig. 915	Fig. 916	Fig. 917	Fig. 918	Fig. 919	Fig. 920	Fig. 921	Fig. 922	Fig. 923	Fig. 924	Fig. 925	Fig. 926	Fig. 927	Fig. 928	Fig. 929	Fig. 930	Fig. 931	Fig. 932	Fig. 933	Fig. 934	Fig. 935	Fig. 936	Fig. 937	Fig. 938	Fig. 939	Fig. 940	Fig. 941	Fig. 942	Fig. 943	Fig. 944	Fig. 945	Fig. 946	Fig. 947	Fig. 948	Fig. 949	Fig. 950	Fig. 951	Fig. 952	Fig. 953	Fig. 954	Fig. 955	Fig. 956	Fig. 957	Fig. 958	Fig. 959	Fig. 960	Fig. 961	Fig. 962	Fig. 963	Fig. 964	Fig. 965	Fig. 966	Fig. 967	Fig. 968	Fig. 969	Fig. 970	Fig. 971	Fig. 972	Fig. 973	Fig. 974	Fig. 975	Fig. 976	Fig. 977	Fig. 978	Fig. 979	Fig. 980	Fig. 981	Fig. 982	Fig. 983	Fig. 984	Fig. 985	Fig. 986	Fig. 987	Fig. 988	Fig. 989	Fig. 990	Fig. 991	Fig. 992	Fig. 993	Fig. 994	Fig. 995	Fig. 996	Fig. 997	Fig. 998	Fig. 999	Fig. 1000	Fig. 1001	Fig. 1002	Fig. 1003	Fig. 1004	Fig. 1005	Fig. 1006	Fig. 1007	Fig. 1008	Fig. 1009	Fig. 1010	Fig. 1011	Fig. 1012	Fig. 1013	Fig. 1014	Fig. 1015	Fig. 1016	Fig. 1017	Fig. 1018	Fig. 1019	Fig. 1020	Fig. 1021	Fig. 1022	Fig. 1023	Fig. 1024	Fig. 1025	Fig. 1026	Fig. 1027	Fig. 1028	Fig. 1029	Fig. 1030	Fig. 1031	Fig. 1032	Fig. 1033	Fig. 1034	Fig. 1035	Fig. 1036	Fig. 1037	Fig. 1038	Fig. 1039	Fig. 1040	Fig. 1041	Fig. 1042	Fig. 1043	Fig. 1044	Fig. 1045	Fig. 1046	Fig. 1047	Fig. 1048	Fig. 1049	Fig. 1050	Fig. 1051	Fig. 1052	Fig. 1053	Fig. 1054	Fig. 1055	Fig. 1056	Fig. 1057	Fig. 1058	Fig. 1059	Fig. 1060	Fig. 1061	Fig. 1062	Fig. 1063	Fig. 1064	Fig. 1065	Fig. 1066	Fig. 1067	Fig. 1068	Fig. 1069	Fig. 1070	Fig. 1071	Fig. 1072	Fig. 1073	Fig. 1074	Fig. 1075	Fig. 1076	Fig. 1077	Fig. 1078	Fig. 1079	Fig. 1080	Fig. 1081	Fig. 1082	Fig. 1083	Fig. 1084	Fig. 1085	Fig. 1086	Fig. 1087	Fig. 1088	Fig. 1089	Fig. 1090	Fig. 1091	Fig. 1092	Fig. 1093	Fig. 1094	Fig. 1095	Fig. 1096	Fig. 1097	Fig. 1098	Fig. 1099	Fig. 1100	Fig. 1101	Fig. 1102	Fig. 1103	Fig. 1104	Fig. 1105	Fig. 1106	Fig. 1107	Fig. 1108	Fig. 1109	Fig. 1110	Fig. 1111	Fig. 1112	Fig. 1113	Fig. 1114	Fig. 1115	Fig. 1116	Fig. 1117	Fig. 1118	Fig. 1119	Fig. 1120
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information is utilized by the system throughout the media experience for routing, billing, monitoring, reporting and other media control functions. Users can manage more aspects of a network than previously possible, and control network activities from a central site. The hybrid network also contains logic for responding to requests for quality of service and reserving the resources to provide the requested services.

16 Claims, 191 Drawing figures  
Exemplary Claim Number: 1  
Number of Drawing Sheets: 133

Full	Title	Abstract	Front	Review	Classification	Date	Reference	Claims	Index	Drawings
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☐ 19. Document ID: US 6330554 B1

L6: Entry 19 of 39

File: USPT

Dec 11, 2001

US-PAT-NO: 6330554  
DOCUMENT-IDENTIFIER: US 6330554 B1

TITLE: Methods and apparatus using task models for targeting marketing information to computer users based on a task being performed

DATE-ISSUED: December 11, 2001

INVENTOR-INFORMATION:

NAME	CITY	STATE	ZIP CODE	COUNTRY
Altschuler; Steven J.	Redmond	WA		
Ingerman; David	New York	NY		
Jung; Edward K.	Bellevue	WA		
Ridgeway; Greg	Bellevue	WA		
Wu; Lani F.	Redmond	WA		

US-CL-CURRENT: 706/21; 705/10

ABSTRACT:

Methods and apparatus for analyzing tasks performed by computer users by (i) gathering usage data, (ii) converting logged usage data into a uniform format, (iii) determining or defining task boundaries, and (iv) determining a task analysis model by "clustering" similar tasks together. The task analysis model may be used to (i) help users complete a task (such help, for example, may be in the form of a gratuitous help function), and/or (ii) to target marketing information to users based on user inputs and the task analysis model. The present invention also provides a uniform semantic network for representing different types of objects in a uniform way.

11 Claims, 69 Drawing figures  
Exemplary Claim Number: 1  
Number of Drawing Sheets: 46

Full	Title	Citation	Front	Review	Classification	Date	Reference	Abstract	Claims	Index	Drawings
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☐ 20. Document ID: US 6246975 B1

L6: Entry 20 of 39

File: USPT

Jun 12, 2001

US-PAT-NO: 6246975

DOCUMENT-IDENTIFIER: US 6246975 B1

**\*\* See image for Certificate of Correction \*\***

TITLE: Computer architecture and process of patient generation, evolution, and simulation for computer based testing system

DATE-ISSUED: June 12, 2001

INVENTOR-INFORMATION:

NAME	CITY	STATE	ZIP CODE	COUNTRY
Rivonelli; Richard J.	Lexington	KY		
Sumner, II; Walton	Webster Groves	MO		
Marek; Victor W.	Lexington	KY		
Truszczynski; Miroslaw	Lexington	KY		

US-CL-CURRENT: 703/11; 128/920, 434/262

ABSTRACT:

A computer implemented simulation and evaluation method simulates interventions to a patient by a user, and evaluates the interventions responsive to predetermined criteria and the interventions. The method includes defining a test area to evaluate the user to at least one of predetermined criteria and a user profile, selecting genetic information of the patient responsive to the test area, and generating a patient history responsive to the test area and the genetic information. The method also includes receiving at least one intervention input by the user, and evaluating the user responsive to the intervention and predetermined criteria.

51 Claims, 18 Drawing figures

Exemplary Claim Number: 1

Number of Drawing Sheets: 16

Full	Title	Citation	Front	Review	Classification	Date	Reference	Abstract	Claims	Index	Drawings
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☐ 21. Document ID: US 6003039 A

L6: Entry 21 of 39

File: USPT

Dec 14, 1999

US-PAT-NO: 6003039

DOCUMENT-IDENTIFIER: US 6003039 A

TITLE: Data repository with user accessible and modifiable reuse criteria

DATE-ISSUED: December 14, 1999

INVENTOR-INFORMATION:

NAME	CITY	STATE	ZIP CODE	COUNTRY
Barry; Tim	Jersey City	NJ		
Lane; Flint	Princeton Junction	NJ		

US-CL-CURRENT: 707/103R; 707/102, 707/2, 707/201, 707/203

ABSTRACT:

The invention disclosed herein is implemented in a repository which stores metadata relating to data stored in one or more databases. The repository includes a repository database in which the metadata is stored, one or more scanners each of which scans at least one database and obtains metadata therefrom, and one or more loaders each of which loads metadata obtained by at least one scanner into the repository database in accordance with the externalized reuse criteria. According to the invention, metadata stored in the repository is reused, for example, not replaced by identical metadata when the repository is updated or populated, and the criteria governing reuse is externalized, i.e., accessible and modifiable by a repository user. The reuse criteria accessible to repository users is stored separate from repository program code at a non-programming level such that the customer (user) can change the reuse procedures without an experienced programmer.

13 Claims, 17 Drawing figures

Exemplary Claim Number: 1

Number of Drawing Sheets: 15

Full	Title	Citation	Front	Review	Classification	Date	Reference	Abstract	Claims	Index	Drawings
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☐ 22. Document ID: US 6002396 A

L6: Entry 22 of 39

File: USPT

Dec 14, 1999

US-PAT-NO: 6002396

DOCUMENT-IDENTIFIER: US 6002396 A

TITLE: System and method for defining a process structure for performing a task

DATE-ISSUED: December 14, 1999

INVENTOR-INFORMATION:

NAME	CITY	STATE	ZIP CODE	COUNTRY
Davies; Trevor Bryan	Essex CM6 1XX			GB

US-CL-CURRENT: 715/763; 705/7, 705/8, 715/839, 715/853, 715/965, 715/967

ABSTRACT:

A system and method for defining a process structure for performing a task. The system comprises a computer, having a data storage memory, a keyboard for inputting data and a screen. A user inputs a first process definition which comprises a verb word and an object word defining the task for which a structure is to be created.

The user is then able to define subsequent process definitions which are a predicted consequence of executing the first process definition or a predicted constituent step in executing the first process definition. By analyzing each process definition at each stage a complete process structure for performing the task can be built up and refined. The user is also able to specify particular object words falling within the meaning of the object word of a particular process definition which can be called up in tabular form on the screen, overwriting the display of process definitions in the process structure.

32 Claims, 26 Drawing figures  
Exemplary Claim Number: 16  
Number of Drawing Sheets: 26

Full	Title	Citation	Front	Review	Classification	Date	Reference			Claims	Image	Draw D
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☐ 23. Document ID: US 5999525 A

L6: Entry 23 of 39

File: USPT

Dec 7, 1999

US-PAT-NO: 5999525  
DOCUMENT-IDENTIFIER: US 5999525 A

TITLE: Method for video telephony over a hybrid network

DATE-ISSUED: December 7, 1999

INVENTOR-INFORMATION:

NAME	CITY	STATE	ZIP CODE	COUNTRY
Krishnaswamy; Sridhar	Cedar Rapids	IA		
Elliott; Isaac K.	Colorado Springs	CO		
Reynolds; Tim E.	Iowa City	IA		
Forgy; Glen A.	Iowa City	IA		
Solbrig; Erin M.	Cedar Rapids	IA		

US-CL-CURRENT: 370/352; 370/389, 370/392, 379/114.15, 379/90.01, 379/93.07

ABSTRACT:

Telephone calls, data and other multimedia information including video, audio and data is routed through a switched network which includes transfer of information across the internet. Users can transmit video, audio and data communications of designated quality over the internet to other registered video telephony users. Users can manage more aspects of a network than previously possible, and control network activities from a central site.

30 Claims, 190 Drawing figures  
Exemplary Claim Number: 11  
Number of Drawing Sheets: 134

Full	Title	Citation	Front	Review	Classification	Date	Reference			Claims	Image	Draw D
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☐ 24. Document ID: US 5960200 A

L6: Entry 24 of 39

File: USPT

Sep 28, 1999

US-PAT-NO: 5960200

DOCUMENT-IDENTIFIER: US 5960200 A

TITLE: System to transition an enterprise to a distributed infrastructure

DATE-ISSUED: September 28, 1999

INVENTOR-INFORMATION:

NAME	CITY	STATE	ZIP CODE	COUNTRY
Eager; Timothy	Fullerton	CA		
Anand; Madhav	Cambridge	MA		
Aslanian; Edouard	Hermosa Beach	CA		

US-CL-CURRENT: 717/147; 703/13, 703/20, 705/7, 709/201, 717/103, 717/104, 717/108

ABSTRACT:

An automated system transitions an entire enterprise to a distributed infrastructure. The system includes a process for organizing and managing the transition, a multi-tiered client/server architecture that adheres to open systems standards, a system to automate the transition of existing applications to this architecture, and a system to enable the creation or modification of applications based on this architecture.

54 Claims, 36 Drawing figures

Exemplary Claim Number: 1

Number of Drawing Sheets: 36

Full	Title	Citation	Front	Review	Classification	Date	Reference				Claims	Index	Drawings
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☐ 25. Document ID: US 5915240 A

L6: Entry 25 of 39

File: USPT

Jun 22, 1999

US-PAT-NO: 5915240

DOCUMENT-IDENTIFIER: US 5915240 A

TITLE: Computer system and method for accessing medical information over a network

DATE-ISSUED: June 22, 1999

INVENTOR-INFORMATION:

NAME	CITY	STATE	ZIP CODE	COUNTRY
Karpf; Ronald S.	Gaithersburg	MD	20878	

US-CL-CURRENT: 705/2; 705/1, 709/203, 709/227

ABSTRACT:

The invention is a Medical Lookup Reference computer system for accessing medical information over a network. The system partitions the functioning of the system between a client and server program in an optimal manner to assure synchronization of the master medical information databases on the servers with the local medical information database on the client, minimize the use of network resources, and allow new types of medical information to be easily included in the system. A server site on the network maintains a description of its medical information, as well as the most current and up-to-date medical reference information. The client program maintains a local database which is automatically synchronized over the network with revisions and new medical information, and provides a user with an interface to fully review the information in the database.

The system also uses a context-sensitive call facility so that users of the Medical Lookup Reference program can easily get further expert assistance about the medical topic. The call feature uses the network connection to establish a conversation between the user and a person at a help site specified by the type of medical information they are currently referencing. Once a connection is established, the system allows the user to engage in a conversation with the person at the help site, and a record of the conversation can be saved in a database for auditing purposes.

12 Claims, 24 Drawing figures  
Exemplary Claim Number: 11  
Number of Drawing Sheets: 23

Full	Title	Citation	Front	Review	Classification	Date	Reference			Claims	FIGS	Drawing
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☐ 26. Document ID: US 5867495 A

L6: Entry 26 of 39

File: USPT

Feb 2, 1999

US-PAT-NO: 5867495

DOCUMENT-IDENTIFIER: US 5867495 A

TITLE: System, method and article of manufacture for communications utilizing calling, plans in a hybrid network

DATE-ISSUED: February 2, 1999

INVENTOR-INFORMATION:

NAME	CITY	STATE	ZIP CODE	COUNTRY
Elliott; Isaac K.	Colorado Springs	CO		
Krishnaswamy; Sridhar	Cedar Rapids	IA		

US-CL-CURRENT: 370/352; 370/389, 370/392, 379/11, 379/115.01, 379/90.01, 379/93.07

ABSTRACT:

Telephone calls, data and other multimedia information is routed through a hybrid network which includes transfer of information across the internet utilizing telephony routing information and internet protocol address information. A media order entry captures complete user profile information for a user. This profile

information is utilized by the system throughout the media experience for routing, billing, monitoring, reporting and other media control functions. Users can manage more aspects of a network than previously possible, and control network activities from a central site. Calling card access is provided for users and supports typical calls as well as media transfers over the hybrid network including over the internet.

27 Claims, 190 Drawing figures  
Exemplary Claim Number: 19  
Number of Drawing Sheets: 132

Full	Title	Station	Front	Review	Classification	Date	Reference			Claims	Index	Grand
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☐ 27. Document ID: US 5867494 A

L6: Entry 27 of 39

File: USPT

Feb 2, 1999

US-PAT-NO: 5867494  
DOCUMENT-IDENTIFIER: US 5867494 A

TITLE: System, method and article of manufacture with integrated video conferencing billing in a communication system architecture

DATE-ISSUED: February 2, 1999

INVENTOR-INFORMATION:

NAME	CITY	STATE	ZIP CODE	COUNTRY
Krishnaswamy; Sridhar	Cedar Rapids	IA		
Elliott; Isaac K.	Colorado Springs	CO		
Reynolds; Tim E.	Iowa City	IA		
Forgy; Glen A.	Iowa City	IA		
Solbrig; Erin M.	Cedar Rapids	IA		

US-CL-CURRENT: 370/352; 370/389, 370/392, 379/114.15, 379/90.01, 379/93.07

ABSTRACT:

Telephone calls, data and other multimedia information including video, audio and data is routed through a switched network which includes transfer of information across the internet. Users can participate in video conference calls in which each participant can simultaneously view the video from each other participant and hear the mixed audio from all participants. Users can also share data and documents with other video conference participants. Users can manage more aspects of a network than previously possible, and control network activities from a central site. Billing of the conference call is accomplished utilizing a billing detail record to capture events associated with a call as they occur and debit the appropriate bill.

20 Claims, 192 Drawing figures  
Exemplary Claim Number: 7  
Number of Drawing Sheets: 134

Full	Title	Citation	Front	Review	Classification	Date	Reference	Figures	Tables	Claims	Index	Drawings
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☐ 28. Document ID: US 5826086 A

L6: Entry 28 of 39

File: USPT

Oct 20, 1998

US-PAT-NO: 5826086

DOCUMENT-IDENTIFIER: US 5826086 A

TITLE: Device and method for aiding designing process of software development

DATE-ISSUED: October 20, 1998

INVENTOR-INFORMATION:

NAME	CITY	STATE	ZIP CODE	COUNTRY
Arima; Yasuhiko	Sapporo			JP
Nishiyama; Yoshio	Kawasaki			JP
Fukao; Itaru	Kawasaki			JP
Abe; Hiroaki	Kawasaki			JP
Kubota; Yuji	Sapporo			JP

US-CL-CURRENT: 717/105; 715/967, 717/113

ABSTRACT:

A device for aiding a software designing process in which software is divided into a plurality of tasks includes a dynamic-specification-information editing unit for defining dynamic behaviors between the tasks to create a dynamic specification, a static-specification-information editing unit for defining static configurations between the tasks to create a static specification, and an editing-unit-coordination-controlling unit for coordinating operations of the dynamic-specification-information editing unit and the static-specification-information editing unit.

17 Claims, 22 Drawing figures

Exemplary Claim Number: 1

Number of Drawing Sheets: 22

Full	Title	Citation	Front	Review	Classification	Date	Reference	Figures	Tables	Claims	Index	Drawings
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☐ 29. Document ID: US 5767854 A

L6: Entry 29 of 39

File: USPT

Jun 16, 1998

US-PAT-NO: 5767854

DOCUMENT-IDENTIFIER: US 5767854 A

TITLE: Multidimensional data display and manipulation system and methods for using same

DATE-ISSUED: June 16, 1998



## INVENTOR-INFORMATION:

NAME	CITY	STATE	ZIP CODE	COUNTRY
Anwar; Mohammed S.	Houston	TX	77055	

US-CL-CURRENT: 715/848; 345/419

## ABSTRACT:

This invention discloses a user interface and data management procedures for the efficient display, manipulation and analysis of multi attributed data or data amenable to multidimensional display, manipulation and management. The invention is centered on the construction and use of data carrousel comprising one or more n-gons where the each n-gon can be a layered n-gon at solid or each side of each n-gon can be a single face of an embedded n-gon.

10 Claims, 39 Drawing figures

Exemplary Claim Number: 7

Number of Drawing Sheets: 39

Full	Title	Citation	Front	Review	Classification	Date	Reference	Fig. 1	Fig. 2	Fig. 3	Fig. 4	Fig. 5	Fig. 6	Fig. 7	Fig. 8	Fig. 9	Fig. 10	Fig. 11	Fig. 12	Fig. 13	Fig. 14	Fig. 15	Fig. 16	Fig. 17	Fig. 18	Fig. 19	Fig. 20	Fig. 21	Fig. 22	Fig. 23	Fig. 24	Fig. 25	Fig. 26	Fig. 27	Fig. 28	Fig. 29	Fig. 30	Fig. 31	Fig. 32	Fig. 33	Fig. 34	Fig. 35	Fig. 36	Fig. 37	Fig. 38	Fig. 39	Fig. 40	Fig. 41	Fig. 42	Fig. 43	Fig. 44	Fig. 45	Fig. 46	Fig. 47	Fig. 48	Fig. 49	Fig. 50	Fig. 51	Fig. 52	Fig. 53	Fig. 54	Fig. 55	Fig. 56	Fig. 57	Fig. 58	Fig. 59	Fig. 60	Fig. 61	Fig. 62	Fig. 63	Fig. 64	Fig. 65	Fig. 66	Fig. 67	Fig. 68	Fig. 69	Fig. 70	Fig. 71	Fig. 72	Fig. 73	Fig. 74	Fig. 75	Fig. 76	Fig. 77	Fig. 78	Fig. 79	Fig. 80	Fig. 81	Fig. 82	Fig. 83	Fig. 84	Fig. 85	Fig. 86	Fig. 87	Fig. 88	Fig. 89	Fig. 90	Fig. 91	Fig. 92	Fig. 93	Fig. 94	Fig. 95	Fig. 96	Fig. 97	Fig. 98	Fig. 99	Fig. 100	Fig. 101	Fig. 102	Fig. 103	Fig. 104	Fig. 105	Fig. 106	Fig. 107	Fig. 108	Fig. 109	Fig. 110	Fig. 111	Fig. 112	Fig. 113	Fig. 114	Fig. 115	Fig. 116	Fig. 117	Fig. 118	Fig. 119	Fig. 120	Fig. 121	Fig. 122	Fig. 123	Fig. 124	Fig. 125	Fig. 126	Fig. 127	Fig. 128	Fig. 129	Fig. 130	Fig. 131	Fig. 132	Fig. 133	Fig. 134	Fig. 135	Fig. 136	Fig. 137	Fig. 138	Fig. 139	Fig. 140	Fig. 141	Fig. 142	Fig. 143	Fig. 144	Fig. 145	Fig. 146	Fig. 147	Fig. 148	Fig. 149	Fig. 150	Fig. 151	Fig. 152	Fig. 153	Fig. 154	Fig. 155	Fig. 156	Fig. 157	Fig. 158	Fig. 159	Fig. 160	Fig. 161	Fig. 162	Fig. 163	Fig. 164	Fig. 165	Fig. 166	Fig. 167	Fig. 168	Fig. 169	Fig. 170	Fig. 171	Fig. 172	Fig. 173	Fig. 174	Fig. 175	Fig. 176	Fig. 177	Fig. 178	Fig. 179	Fig. 180	Fig. 181	Fig. 182	Fig. 183	Fig. 184	Fig. 185	Fig. 186	Fig. 187	Fig. 188	Fig. 189	Fig. 190	Fig. 191	Fig. 192	Fig. 193	Fig. 194	Fig. 195	Fig. 196	Fig. 197	Fig. 198	Fig. 199	Fig. 200	Fig. 201	Fig. 202	Fig. 203	Fig. 204	Fig. 205	Fig. 206	Fig. 207	Fig. 208	Fig. 209	Fig. 210	Fig. 211	Fig. 212	Fig. 213	Fig. 214	Fig. 215	Fig. 216	Fig. 217	Fig. 218	Fig. 219	Fig. 220	Fig. 221	Fig. 222	Fig. 223	Fig. 224	Fig. 225	Fig. 226	Fig. 227	Fig. 228	Fig. 229	Fig. 230	Fig. 231	Fig. 232	Fig. 233	Fig. 234	Fig. 235	Fig. 236	Fig. 237	Fig. 238	Fig. 239	Fig. 240	Fig. 241	Fig. 242	Fig. 243	Fig. 244	Fig. 245	Fig. 246	Fig. 247	Fig. 248	Fig. 249	Fig. 250	Fig. 251	Fig. 252	Fig. 253	Fig. 254	Fig. 255	Fig. 256	Fig. 257	Fig. 258	Fig. 259	Fig. 260	Fig. 261	Fig. 262	Fig. 263	Fig. 264	Fig. 265	Fig. 266	Fig. 267	Fig. 268	Fig. 269	Fig. 270	Fig. 271	Fig. 272	Fig. 273	Fig. 274	Fig. 275	Fig. 276	Fig. 277	Fig. 278	Fig. 279	Fig. 280	Fig. 281	Fig. 282	Fig. 283	Fig. 284	Fig. 285	Fig. 286	Fig. 287	Fig. 288	Fig. 289	Fig. 290	Fig. 291	Fig. 292	Fig. 293	Fig. 294	Fig. 295	Fig. 296	Fig. 297	Fig. 298	Fig. 299	Fig. 300	Fig. 301	Fig. 302	Fig. 303	Fig. 304	Fig. 305	Fig. 306	Fig. 307	Fig. 308	Fig. 309	Fig. 310	Fig. 311	Fig. 312	Fig. 313	Fig. 314	Fig. 315	Fig. 316	Fig. 317	Fig. 318	Fig. 319	Fig. 320	Fig. 321	Fig. 322	Fig. 323	Fig. 324	Fig. 325	Fig. 326	Fig. 327	Fig. 328	Fig. 329	Fig. 330	Fig. 331	Fig. 332	Fig. 333	Fig. 334	Fig. 335	Fig. 336	Fig. 337	Fig. 338	Fig. 339	Fig. 340	Fig. 341	Fig. 342	Fig. 343	Fig. 344	Fig. 345	Fig. 346	Fig. 347	Fig. 348	Fig. 349	Fig. 350	Fig. 351	Fig. 352	Fig. 353	Fig. 354	Fig. 355	Fig. 356	Fig. 357	Fig. 358	Fig. 359	Fig. 360	Fig. 361	Fig. 362	Fig. 363	Fig. 364	Fig. 365	Fig. 366	Fig. 367	Fig. 368	Fig. 369	Fig. 370	Fig. 371	Fig. 372	Fig. 373	Fig. 374	Fig. 375	Fig. 376	Fig. 377	Fig. 378	Fig. 379	Fig. 380	Fig. 381	Fig. 382	Fig. 383	Fig. 384	Fig. 385	Fig. 386	Fig. 387	Fig. 388	Fig. 389	Fig. 390	Fig. 391	Fig. 392	Fig. 393	Fig. 394	Fig. 395	Fig. 396	Fig. 397	Fig. 398	Fig. 399	Fig. 400	Fig. 401	Fig. 402	Fig. 403	Fig. 404	Fig. 405	Fig. 406	Fig. 407	Fig. 408	Fig. 409	Fig. 410	Fig. 411	Fig. 412	Fig. 413	Fig. 414	Fig. 415	Fig. 416	Fig. 417	Fig. 418	Fig. 419	Fig. 420	Fig. 421	Fig. 422	Fig. 423	Fig. 424	Fig. 425	Fig. 426	Fig. 427	Fig. 428	Fig. 429	Fig. 430	Fig. 431	Fig. 432	Fig. 433	Fig. 434	Fig. 435	Fig. 436	Fig. 437	Fig. 438	Fig. 439	Fig. 440	Fig. 441	Fig. 442	Fig. 443	Fig. 444	Fig. 445	Fig. 446	Fig. 447	Fig. 448	Fig. 449	Fig. 450	Fig. 451	Fig. 452	Fig. 453	Fig. 454	Fig. 455	Fig. 456	Fig. 457	Fig. 458	Fig. 459	Fig. 460	Fig. 461	Fig. 462	Fig. 463	Fig. 464	Fig. 465	Fig. 466	Fig. 467	Fig. 468	Fig. 469	Fig. 470	Fig. 471	Fig. 472	Fig. 473	Fig. 474	Fig. 475	Fig. 476	Fig. 477	Fig. 478	Fig. 479	Fig. 480	Fig. 481	Fig. 482	Fig. 483	Fig. 484	Fig. 485	Fig. 486	Fig. 487	Fig. 488	Fig. 489	Fig. 490	Fig. 491	Fig. 492	Fig. 493	Fig. 494	Fig. 495	Fig. 496	Fig. 497	Fig. 498	Fig. 499	Fig. 500	Fig. 501	Fig. 502	Fig. 503	Fig. 504	Fig. 505	Fig. 506	Fig. 507	Fig. 508	Fig. 509	Fig. 510	Fig. 511	Fig. 512	Fig. 513	Fig. 514	Fig. 515	Fig. 516	Fig. 517	Fig. 518	Fig. 519	Fig. 520	Fig. 521	Fig. 522	Fig. 523	Fig. 524	Fig. 525	Fig. 526	Fig. 527	Fig. 528	Fig. 529	Fig. 530	Fig. 531	Fig. 532	Fig. 533	Fig. 534	Fig. 535	Fig. 536	Fig. 537	Fig. 538	Fig. 539	Fig. 540	Fig. 541	Fig. 542	Fig. 543	Fig. 544	Fig. 545	Fig. 546	Fig. 547	Fig. 548	Fig. 549	Fig. 550	Fig. 551	Fig. 552	Fig. 553	Fig. 554	Fig. 555	Fig. 556	Fig. 557	Fig. 558	Fig. 559	Fig. 560	Fig. 561	Fig. 562	Fig. 563	Fig. 564	Fig. 565	Fig. 566	Fig. 567	Fig. 568	Fig. 569	Fig. 570	Fig. 571	Fig. 572	Fig. 573	Fig. 574	Fig. 575	Fig. 576	Fig. 577	Fig. 578	Fig. 579	Fig. 580	Fig. 581	Fig. 582	Fig. 583	Fig. 584	Fig. 585	Fig. 586	Fig. 587	Fig. 588	Fig. 589	Fig. 590	Fig. 591	Fig. 592	Fig. 593	Fig. 594	Fig. 595	Fig. 596	Fig. 597	Fig. 598	Fig. 599	Fig. 600	Fig. 601	Fig. 602	Fig. 603	Fig. 604	Fig. 605	Fig. 606	Fig. 607	Fig. 608	Fig. 609	Fig. 610	Fig. 611	Fig. 612	Fig. 613	Fig. 614	Fig. 615	Fig. 616	Fig. 617	Fig. 618	Fig. 619	Fig. 620	Fig. 621	Fig. 622	Fig. 623	Fig. 624	Fig. 625	Fig. 626	Fig. 627	Fig. 628	Fig. 629	Fig. 630	Fig. 631	Fig. 632	Fig. 633	Fig. 634	Fig. 635	Fig. 636	Fig. 637	Fig. 638	Fig. 639	Fig. 640	Fig. 641	Fig. 642	Fig. 643	Fig. 644	Fig. 645	Fig. 646	Fig. 647	Fig. 648	Fig. 649	Fig. 650	Fig. 651	Fig. 652	Fig. 653	Fig. 654	Fig. 655	Fig. 656	Fig. 657	Fig. 658	Fig. 659	Fig. 660	Fig. 661	Fig. 662	Fig. 663	Fig. 664	Fig. 665	Fig. 666	Fig. 667	Fig. 668	Fig. 669	Fig. 670	Fig. 671	Fig. 672	Fig. 673	Fig. 674	Fig. 675	Fig. 676	Fig. 677	Fig. 678	Fig. 679	Fig. 680	Fig. 681	Fig. 682	Fig. 683	Fig. 684	Fig. 685	Fig. 686	Fig. 687	Fig. 688	Fig. 689	Fig. 690	Fig. 691	Fig. 692	Fig. 693	Fig. 694	Fig. 695	Fig. 696	Fig. 697	Fig. 698	Fig. 699	Fig. 700	Fig. 701	Fig. 702	Fig. 703	Fig. 704	Fig. 705	Fig. 706	Fig. 707	Fig. 708	Fig. 709	Fig. 710	Fig. 711	Fig. 712	Fig. 713	Fig. 714	Fig. 715	Fig. 716	Fig. 717	Fig. 718	Fig. 719	Fig. 720	Fig. 721	Fig. 722	Fig. 723	Fig. 724	Fig. 725	Fig. 726	Fig. 727	Fig. 728	Fig. 729	Fig. 730	Fig. 731	Fig. 732	Fig. 733	Fig. 734	Fig. 735	Fig. 736	Fig. 737	Fig. 738	Fig. 739	Fig. 740	Fig. 741	Fig. 742	Fig. 743	Fig. 744	Fig. 745	Fig. 746	Fig. 747	Fig. 748	Fig. 749	Fig. 750	Fig. 751	Fig. 752	Fig. 753	Fig. 754	Fig. 755	Fig. 756	Fig. 757	Fig. 758	Fig. 759	Fig. 760	Fig. 761	Fig. 762	Fig. 763	Fig. 764	Fig. 765	Fig. 766	Fig. 767	Fig. 768	Fig. 769	Fig. 770	Fig. 771	Fig. 772	Fig. 773	Fig. 774	Fig. 775	Fig. 776	Fig. 777	Fig. 778	Fig. 779	Fig. 780	Fig. 781	Fig. 782	Fig. 783	Fig. 784	Fig. 785	Fig. 786	Fig. 787	Fig. 788	Fig. 789	Fig. 790	Fig. 791	Fig. 792	Fig. 793	Fig. 794	Fig. 795	Fig. 796	Fig. 797	Fig. 798	Fig. 799	Fig. 800	Fig. 801	Fig. 802	Fig. 803	Fig. 804	Fig. 805	Fig. 806	Fig. 807	Fig. 808	Fig. 809	Fig. 810	Fig. 811	Fig. 812	Fig. 813	Fig. 814	Fig. 815	Fig. 816	Fig. 817	Fig. 818	Fig. 819	Fig. 820	Fig. 821	Fig. 822	Fig. 823	Fig. 824	Fig. 825	Fig. 826	Fig. 827	Fig. 828	Fig. 829	Fig. 830	Fig. 831	Fig. 832	Fig. 833	Fig. 834	Fig. 835	Fig. 836	Fig. 837	Fig. 838	Fig. 839	Fig. 840	Fig. 841	Fig. 842	Fig. 843	Fig. 844	Fig. 845	Fig. 846	Fig. 847	Fig. 848	Fig. 849	Fig. 850	Fig. 851	Fig. 852	Fig. 853	Fig. 854	Fig. 855	Fig. 856	Fig. 857	Fig. 858	Fig. 859	Fig. 860	Fig. 861	Fig. 862	Fig. 863	Fig. 864	Fig. 865	Fig. 866	Fig. 867	Fig. 868	Fig. 869	Fig. 870	Fig. 871	Fig. 872	Fig. 873	Fig. 874	Fig. 875	Fig. 876	Fig. 877	Fig. 878	Fig. 879	Fig. 880	Fig. 881	Fig. 882	Fig. 883	Fig. 884	Fig. 885	Fig. 886	Fig. 887	Fig. 888	Fig. 889	Fig. 890	Fig. 891	Fig. 892	Fig. 893	Fig. 894	Fig. 895	Fig. 896	Fig. 897	Fig. 898	Fig. 899	Fig. 900	Fig. 901	Fig. 902	Fig. 903	Fig. 904	Fig. 905	Fig. 906	Fig. 907	Fig. 908	Fig. 909	Fig. 910	Fig. 911	Fig. 912	Fig. 913	Fig. 914	Fig. 915	Fig. 916	Fig. 917	Fig. 918	Fig. 919	Fig. 920	Fig. 921	Fig. 922	Fig. 923	Fig. 924	Fig. 925	Fig. 926	Fig. 927	Fig. 928	Fig. 929	Fig. 930	Fig. 931	Fig. 932	Fig. 933	Fig. 934	Fig. 935	Fig. 936	Fig. 937	Fig. 938	Fig. 939	Fig. 940	Fig. 941	Fig. 942	Fig. 943	Fig. 944	Fig. 945	Fig. 946	Fig. 947	Fig. 948	Fig. 949	Fig. 950	Fig. 951	Fig. 952	Fig. 953	Fig. 954	Fig. 955	Fig. 956	Fig. 957	Fig. 958	Fig. 959	Fig. 960	Fig. 961	Fig. 962	Fig. 963	Fig. 964	Fig. 965	Fig. 966	Fig. 967	Fig. 968	Fig. 969	Fig. 970	Fig. 971	Fig. 972	Fig. 973	Fig. 974	Fig. 975	Fig. 976	Fig. 977	Fig. 978	Fig. 979	Fig. 980	Fig. 981	Fig. 982	Fig. 983	Fig. 984	Fig. 985	Fig. 986	Fig. 987	Fig. 988	Fig. 989	Fig. 990	Fig. 991	Fig. 992	Fig. 993	Fig. 994	Fig. 995	Fig. 996	Fig. 997	Fig. 998	Fig. 999	Fig. 1000	Fig. 1001	Fig. 1002	Fig. 1003	Fig. 1004	Fig. 1005	Fig. 1006	Fig. 1007	Fig. 1008	Fig. 1009	Fig. 1010	Fig. 1011	Fig. 1012	Fig. 1013	Fig. 1014	Fig. 1015	Fig. 1016	Fig. 1017	Fig. 1018	Fig. 1019	Fig. 1020	Fig. 1021	Fig. 1022	Fig. 1023	Fig. 1024	Fig. 1025	Fig. 1026	Fig. 1027	Fig. 1028	Fig. 1029	Fig. 1030	Fig. 1031	Fig. 1032	Fig. 1033	Fig. 1034	Fig. 1035	Fig. 1036	Fig. 1037	Fig. 1038	Fig. 1039	Fig. 1040	Fig. 1041	Fig. 1042	Fig. 1043	Fig. 1044	Fig. 1045	Fig. 1046	Fig. 1047	Fig. 1048	Fig. 1049	Fig. 1050	Fig. 1051	Fig. 1052	Fig. 1053	Fig. 1054	Fig. 1055	Fig. 1056	Fig. 1057	Fig. 1058	Fig. 1059	Fig. 1060	Fig. 1061	Fig. 1062	Fig. 1063	Fig. 1064	Fig. 1065	Fig. 1066	Fig. 1067	Fig. 1068	Fig. 1069	Fig. 1070	Fig. 1071	Fig. 1072	Fig. 1073	Fig. 1074	Fig. 1075	Fig. 1076	Fig. 1077	Fig. 1078	Fig. 1079	Fig. 1080	Fig. 1081	Fig. 1082	Fig. 1083	Fig. 1084	Fig. 1085	Fig. 1086	Fig. 1087	Fig. 1088	Fig. 1089	Fig. 1090	Fig. 1091	Fig. 1092	Fig. 1093	Fig. 1094	Fig. 1095	Fig. 1096	Fig. 1097	Fig. 1098	Fig. 1099	Fig. 1100	Fig. 1101	Fig. 1102	Fig. 1103	Fig. 1104	Fig. 1105	Fig. 1106	Fig. 1107	Fig. 1108	Fig. 1109	Fig. 1110	Fig. 1111	Fig. 1112	Fig. 1113	Fig. 1114	Fig. 1115	Fig. 1116	Fig. 1117	Fig. 1118	Fig. 1119	Fig. 1120
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can be determined by Entity-Relationship (ER) modelling to generate a search schema. After documents receive relevancy values, the user is free to view only those documents having relevancy values that exceed a preselected threshold value. Documents can be ranked from most relevant to least relevant. Feedback information from viewing the retrieved documents can be used to update the synonym/domain lists of the filtering window to enhance the relevance retrieval of subsequent documents.

11 Claims, 16 Drawing figures  
Exemplary Claim Number: 1  
Number of Drawing Sheets: 16

Full	Title	Citation	Front	Review	Classification	Date	Reference	Abstract	Claims	Index	Drawings
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☐ 31. Document ID: US 5535325 A

L6: Entry 31 of 39

File: USPT

Jul 9, 1996

US-PAT-NO: 5535325  
DOCUMENT-IDENTIFIER: US 5535325 A

TITLE: Method and apparatus for automatically generating database definitions of indirect facts from entity-relationship diagrams

DATE-ISSUED: July 9, 1996

INVENTOR-INFORMATION:

NAME	CITY	STATE	ZIP CODE	COUNTRY
Cattell; Kevin T.	Garner	NC		
Cromer; William R.	Raleigh	NC		
Lin; Shih-ta	San Jose	CA		
Neuchterlein; Bruce E.	Cary	NC		
Potok; Thomas E.	Apex	NC		

US-CL-CURRENT: 707/102; 715/967, 717/123

ABSTRACT:

A computer-implemented process accepts information input from an existing ER model of data representing a given environment and, in response to the input, automatically creates a new database structural definition that represents indirect facts about a base entity that are indicated by the input.

10 Claims, 7 Drawing figures  
Exemplary Claim Number: 1  
Number of Drawing Sheets: 6

Full	Title	Citation	Front	Review	Classification	Date	Reference	Abstract	Claims	Index	Drawings
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☐ 32. Document ID: US 5495567 A

US-PAT-NO: 5495567

DOCUMENT-IDENTIFIER: US 5495567 A

TITLE: Automatic interface layout generator for database systems

DATE-ISSUED: February 27, 1996

## INVENTOR-INFORMATION:

NAME	CITY	STATE	ZIP CODE	COUNTRY
Iizawa; Atsushi	Tokyo			JP
Yoshiura; Yukari	Kanagawa			JP
Pizano; Arturo	Milpitas	CA		

US-CL-CURRENT: 715/762; 707/102, 715/967, 715/968

## ABSTRACT:

An automatic interface layout generator for database systems is disclosed herein. The automatic generator includes a specification tool for specifying a set of block descriptions representative of specified portions of a database. A block layout generator produces interface objects to be included within an interface of the database, wherein each of the interface objects corresponds to one of the block descriptions and includes a plurality of layout fields. A layout quality parameter is determined for each of the interface objects based on arrangement of the layout fields within the interface objects. A block placement generator arranges sets of the interface objects into block configurations within the interface. A placement quality parameter for each of the block configurations is derived based on a set of block placement rules and on the layout quality parameters, and a final block configuration is selected by comparing the placement quality parameters corresponding to particular block configurations.

17 Claims, 38 Drawing figures

Exemplary Claim Number: 1

Number of Drawing Sheets: 24

Full	Title	Citation	Front	Review	Classification	Date	Reference	Claims	Index	Drawings
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☐ 33. Document ID: US 5488722 A

US-PAT-NO: 5488722

DOCUMENT-IDENTIFIER: US 5488722 A

TITLE: System and method for automating implementation and execution of constraint most likely to be violated in a database

DATE-ISSUED: January 30, 1996

## INVENTOR-INFORMATION:

NAME	CITY	STATE	ZIP CODE	COUNTRY
Potok; Thomas E.	Apex	NC		

US-CL-CURRENT: 707/2

ABSTRACT:

Disclosed is a system and method of operating a computer to update a database. An entry made by a user for creating, deleting or modifying an entity type instance is checked to determine applicable constraints, which are then activated and placed in a pool. A firing order is then determined for the activated constraints. The first ranked constraint is then coded, using database calls if necessary to provide data for the logical statements, after which the coded constraint is fired. If the constraint was violated an error is signalled and processing is returned to the step of activating constraints for treatment of revised user data. Otherwise, it is determined if any constraints remain to be fired before returning to the step of activating or exiting.

12 Claims, 6 Drawing figures  
Exemplary Claim Number: 1  
Number of Drawing Sheets: 5

Full	Title	Citation	Front	Review	Classification	Date	Reference			Claims	Index	Drawings
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☐ 34. Document ID: US 5487135 A

L6: Entry 34 of 39

File: USPT

Jan 23, 1996

US-PAT-NO: 5487135

DOCUMENT-IDENTIFIER: US 5487135 A

TITLE: Rule acquisition in knowledge based systems

DATE-ISSUED: January 23, 1996

INVENTOR-INFORMATION:

NAME	CITY	STATE	ZIP CODE	COUNTRY
Freeman; Paul R. W.	Southville Bristol			GB2

US-CL-CURRENT: 706/59

ABSTRACT:

A rule-based system, concerned with a domain of knowledge or operations (the domain theory) and having associated therewith a rule-based entity relationship (ER) system (the ER theory) which represents the domain theory diagrammatically, is supported by a computer system. The system, which constructs a new rule for the domain theory, controls the entry into conditions storage memory or note pad (16) of conditions which together represent the desired rule, and rule assembly logic (17) that generates the desired rule from those entries. A display device (14) displays an ER diagram (FIG. 2) obtained from the ER theory and stored in memory (11, 12). An operator selects, via a mouse and control logic (13, 15), elements of the ER diagram. These elements are entered into the conditions storage means or

note pad (16). Attributes are entered via a combination of selection from the ER diagram and semantic constraints on their values. When all elements and attributes have been so entered, they are compiled into the new rule by rule assembly logic (17) and assimilated into the domain theory by assimilator logic (18).

15 Claims, 9 Drawing figures  
Exemplary Claim Number: 8  
Number of Drawing Sheets: 8

Full	Title	Citation	Front	Review	Classification	Date	Reference	Abstract	Claims	Drawings	Page
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☐ 35. Document ID: US 5469539 A

L6: Entry 35 of 39

File: USPT

Nov 21, 1995

US-PAT-NO: 5469539  
DOCUMENT-IDENTIFIER: US 5469539 A

TITLE: Method for abstracting/detailing structuring elements of system specification information

DATE-ISSUED: November 21, 1995

INVENTOR-INFORMATION:

NAME	CITY	STATE	ZIP CODE	COUNTRY
Usuda; Yutaka	Yokohama			JP

US-CL-CURRENT: 715/841; 345/440, 715/853

ABSTRACT:

The specification abstracting-detailing system stores system specification information in a hierarchical structure. A hierarchy operation selects an object to be detailed or abstracted from the specification information, for updating hierarchical information of a hierarchy between specification information of the hierarchy in such a state that a logical relation of the specification information contained in the hierarchy of the object selected, and for creating or deleting a new hierarchy. This allows the abstracting and detailing to be performed in the course of a natural thinking process by a designer.

1 Claims, 12 Drawing figures  
Exemplary Claim Number: 1  
Number of Drawing Sheets: 11

Full	Title	Citation	Front	Review	Classification	Date	Reference	Abstract	Claims	Drawings	Page
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☐ 36. Document ID: US 5386571 A

L6: Entry 36 of 39

File: USPT

Jan 31, 1995

US-PAT-NO: 5386571

DOCUMENT-IDENTIFIER: US 5386571 A

**\*\* See image for Certificate of Correction \*\***

TITLE: Computer system and method for storing and displaying of a semantically structured entity relationship diagram

DATE-ISSUED: January 31, 1995

INVENTOR-INFORMATION:

NAME	CITY	STATE	ZIP CODE	COUNTRY
Kurz; Wolfgang	Stuttgart			DE

US-CL-CURRENT: 707/100; 358/1.18

ABSTRACT:

The invention concerns a method and system for storing and displaying an entity relationship diagram. The entity relationship diagram of the invention is composed of only four different classes of allowed entity types. Thereby redundancy is eliminated and less storage locations are needed to store the diagram. The diagram comprises kernel entity sets K, attributive entity sets A, role entity sets P and relation entity sets R which are displayed on a display 9.

19 Claims, 17 Drawing figures

Exemplary Claim Number: 1

Number of Drawing Sheets: 9

Full	Title	Citation	Front	Review	Classification	Date	Reference					Claims	Index	Drawings
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☐ 37. Document ID: US 5369761 A

L6: Entry 37 of 39

File: USPT

Nov 29, 1994

US-PAT-NO: 5369761

DOCUMENT-IDENTIFIER: US 5369761 A

**\*\* See image for Certificate of Correction \*\***

TITLE: Automatic and transparent denormalization support, wherein denormalization is achieved through appending of fields to base relations of a normalized database

DATE-ISSUED: November 29, 1994

INVENTOR-INFORMATION:

NAME	CITY	STATE	ZIP CODE	COUNTRY
Conley; John D.	Plano	TX	75025	
Whitehurst; Richard P.	Plano	TX	75023	

US-CL-CURRENT: 707/2

ABSTRACT:

A system may be used to enable a database administrator to selectively denormalize

a database transparently to users and programmers. The system keeps a record of the mapping between the denormalized fields and the base fields from which they are derived. Processors access those recorded links to keep the database self-consistent and to retrieve data from denormalized fields whenever possible.

6 Claims, 11 Drawing figures  
Exemplary Claim Number: 1  
Number of Drawing Sheets: 8

Full	Title	Citation	Front	Review	Classification	Date	Reference			Claims	Index	Drawings
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☐ 38. Document ID: US 4868733 A

L6: Entry 38 of 39

File: USPT

Sep 19, 1989

US-PAT-NO: 4868733  
DOCUMENT-IDENTIFIER: US 4868733 A

TITLE: Document filing system with knowledge-base network of concept interconnected by generic, subsumption, and superclass relations

DATE-ISSUED: September 19, 1989

INVENTOR-INFORMATION:

NAME	CITY	STATE	ZIP CODE	COUNTRY
Fujisawa; Hiromichi	Tokorozawa			JP
Higashino; Jun'ichi	Kokubunji			JP
Hatakeyama; Atushi	Kokubunji			JP

US-CL-CURRENT: 707/5, 706/50, 706/53, 706/55, 706/934, 715/533

ABSTRACT:

A document filing system is provided for storing a large amount of information in proper arrangement for facilitating utilization thereof by a user, while allowing semantical retrieval to be realized even from vague fragmental information. Further, a method is provided for expressing the facts constituting information in terms of "concepts" representing things and "relations" defined between the concepts internally of computer, and a method of inputting user's information to a computer through dialogical procedure and retrieving desired information. Information stored of the computer architects internally a concept network which is displayed in various forms such as hierarchical form based on subsumption relations between the concepts, hierarchical representation based on part-whole relation between the concept, a frame display of a single concepts, and tabular representation of a set of concepts belonging to a given class. The network may be browsed by referring to the contents of the display so that a user can easily know what kind of information has been stored internally of the computer, whereby he or she can perform inputting of new information and retrieval of desired information in a facilitated and simplified manner. The relations stored internally of the computer are classified into "generic relationship" and "instance relation" representing individual facts, whereby a generic framework of facts can be stored. The generic framework is displayed upon interaction with the user for allowing new information to be inputted and desired information to be retrieved in a facilitated and simplified manner. Retrieval by using sematic retrieval formula created

internally through dialogical procedure is realized through inferring processing.

8 Claims, 25 Drawing figures

Exemplary Claim Number: 1

Number of Drawing Sheets: 24

Full	Title	Citation	Front	Review	Classification	Date	Reference	Claims	Index	Drawings
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☐ 39. Document ID: US 4223654 A

L6: Entry 39 of 39

File: USPT

Sep 23, 1980

US-PAT-NO: 4223654

DOCUMENT-IDENTIFIER: US 4223654 A

TITLE: Method and apparatus for controlling the operation of a diesel engine

DATE-ISSUED: September 23, 1980

INVENTOR-INFORMATION:

NAME	CITY	STATE	ZIP CODE	COUNTRY
Wessel; Wolf	Oberriexingen			DE
Sautter; Wilfried	Ditzingen			DE
Engel; Gerhard	Stuttgart			DE
Stumpp; Gerhard	Stuttgart			DE

US-CL-CURRENT: 123/358

ABSTRACT:

A method and apparatus for controlling a Diesel engine by limiting the amount of fuel to be admitted to the engine in dependence on engine speed and on the air mass flow rate. The invention provides a primary set of stored data interrelating these variables. The primary data set is used to generate a set-point value for the position of a movable stop member which limits the mechanical travel of the fuel control rack in the fuel injection pump; the control rack is also subject to the action of a mechanical speed governor. Additional corrections of the maximum amount of fuel are made on the basis of air temperature and fuel temperature. Still further refinements include taking into account exhaust gas temperature and engine starting conditions. The final corrected set-point signal is then compared with the output from a position indicator which is attached to the stop member. A servo-controlled element corrects the position of the stop member until the error indications are minimized in a closed loop, feedback control circuit.

33 Claims, 14 Drawing figures

Exemplary Claim Number: 1

Number of Drawing Sheets: 6

Full	Title	Citation	Front	Review	Classification	Date	Reference	Claims	Index	Drawings
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☐ 1. Document ID: US 6859523 B1

L9: Entry 1 of 10

File: USPT

Feb 22, 2005

US-PAT-NO: 6859523

DOCUMENT-IDENTIFIER: US 6859523 B1

TITLE: Universal task management system, method and product for automatically managing remote workers, including assessing the work product and workers

DATE-ISSUED: February 22, 2005

INVENTOR-INFORMATION:

NAME	CITY	STATE	ZIP CODE	COUNTRY
Jilk; David J.	Broomfield	CO		
Kellner; Brian L.	Superior	CO		
Ganora; Victor	Louisville	CO		
Kotsines; Thomas A.	Denver	CO		

US-CL-CURRENT: 379/32.01; 379/265.01, 379/265.03, 379/265.05, 379/265.06,  
379/265.12, 379/32.02

ABSTRACT:

A computer implemented method, a system, and a software product to automatically manage one or more human workers carrying out a process of manipulating source data provided to produce result data. The process including a set of one or more task steps each having an input and resulting in a task result. The computer implemented method includes receiving units of source data from a customer. For each unit of source data and each task step for the unit of source data, the method includes dispatching the task step and its corresponding input unit to a worker and, after the worker carries out the dispatched task step on the input unit, receiving the task result corresponding to the dispatched task step and input unit from the worker. Each worker is certified to have one or more task skills, wherein each task step requires a corresponding task skill, and wherein the dispatching of any task step occurs automatically substantially without human management to a worker who is certified to have the corresponding task skill of the task step. The method further includes assessing at least some of the task results of at least some of the task steps for at least some of the units of source data. A version of the method further includes generating the result data for the unit of source data from one or more of the task results corresponding to the task steps of the set and sending the result data for the unit of source data to the customer.

79 Claims, 11 Drawing figures

Exemplary Claim Number: 1

Number of Drawing Sheets: 9

Full	Title	Citation	Front	Review	Classification	Date	Reference			Claims	KWIC	Draw D
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☐ 2. Document ID: US 6754181 B1

L9: Entry 2 of 10

File: USPT

Jun 22, 2004

US-PAT-NO: 6754181

DOCUMENT-IDENTIFIER: US 6754181 B1

TITLE: System and method for a directory service supporting a hybrid communication system architecture

DATE-ISSUED: June 22, 2004

## INVENTOR-INFORMATION:

NAME	CITY	STATE	ZIP CODE	COUNTRY
Elliott; Isaac K.	Colorado Springs	CO		
Krishnawswamy; Sridhar	Cedar Rapid	IA		

US-CL-CURRENT: 370/252; 370/352, 370/356

## ABSTRACT:

Telephone calls, data and other multimedia information is routed through a hybrid network which includes transfer of information across the internet utilizing telephony routing information and internet protocol address information. A media order entry captures complete user profile information for a user. This profile information is utilized by the system throughout the media experience for routing, billing, monitoring, reporting and other media control functions. Users can manage more aspects of a network than previously possible, and control network activities from a central site. A directory service that supports a hybrid communication system architecture is provided for routing traffic over the hybrid network and the internet.

12 Claims, 191 Drawing figures

Exemplary Claim Number: 1

Number of Drawing Sheets: 133

Full	Title	Citation	Front	Review	Classification	Date	Reference			Claims	KWIC	Draw D
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☐ 3. Document ID: US 6731625 B1

L9: Entry 3 of 10

File: USPT

May 4, 2004

US-PAT-NO: 6731625

DOCUMENT-IDENTIFIER: US 6731625 B1

TITLE: System, method and article of manufacture for a call back architecture in a hybrid network with support for internet telephony

DATE-ISSUED: May 4, 2004

## INVENTOR-INFORMATION:

NAME	CITY	STATE	ZIP CODE	COUNTRY
Eastep; Guido M.	McKenney	TX		
Litzenberger; Paul	Wilie	TX		
Orebaugh; Shannon R.	Herndon	VA		

US-CL-CURRENT: 370/352; 370/389, 370/392, 379/114.01, 379/90.01, 379/93.07

## ABSTRACT:

A callback system is created utilizing a hybrid telecommunication system including a switched communication network and a packet transmission network. A call parameter database is stored in a memory. A call is received on the system. The call parameter database is accessed to determine at least one call parameter. The call is routed over the switched communication network and the packet transmission network based on the at least one call parameter. A plurality of service engines is provided, each configured to execute desired service logic utilizing expert system.

39 Claims, 188 Drawing figures  
Exemplary Claim Number: 1  
Number of Drawing Sheets: 187

Full	Title	Citation	Front	Review	Classification	Date	Reference			Claims	COMM	Drawing
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☐ 4. Document ID: US 6476814 B1

L9: Entry 4 of 10

File: USPT

Nov 5, 2002

US-PAT-NO: 6476814

DOCUMENT-IDENTIFIER: US 6476814 B1

TITLE: Display structure for representation of complex systems

DATE-ISSUED: November 5, 2002

## INVENTOR-INFORMATION:

NAME	CITY	STATE	ZIP CODE	COUNTRY
Garvey; Robert B.	Lake Lotawana	MO		

US-CL-CURRENT: 345/440

## ABSTRACT:

A multi-dimensional outline, a wordgraph, represents a subset of a directed graph with a given starting node where all edges related to a node in one direction, either incident out of that node or incident into that node appear indented below that node as in outlining represented by their terminal node or initial node respectively and all edges related in the other direction appear indented above that node represented by their initial node or terminal node, respectively, with the initial nodes and terminal nodes distinguished.

10 Claims, 2 Drawing figures  
Exemplary Claim Number: 1  
Number of Drawing Sheets: 2

Full	Title	Citation	Front	Review	Classification	Date	Reference			Claims	KWIC	Draw De
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☐ 5. Document ID: US 6335927 B1

L9: Entry 5 of 10

File: USPT

Jan 1, 2002

US-PAT-NO: 6335927  
DOCUMENT-IDENTIFIER: US 6335927 B1

TITLE: System and method for providing requested quality of service in a hybrid network

DATE-ISSUED: January 1, 2002

INVENTOR-INFORMATION:

NAME	CITY	STATE	ZIP CODE	COUNTRY
Elliott; Isaac K.	Colorado Springs	CO		
Reynolds; Tim E.	Iowa City	IA		
Krishnaswamy; Sridhar	Cedar Rapid	IA		

US-CL-CURRENT: 370/352

ABSTRACT:

Telephone calls, data and other multimedia information is routed through a hybrid network which includes transfer of information across the internet. A media order entry captures complete user profile information for a user. This profile information is utilized by the system throughout the media experience for routing, billing, monitoring, reporting and other media control functions. Users can manage more aspects of a network than previously possible, and control network activities from a central site. The hybrid network also contains logic for responding to requests for quality of service and reserving the resources to provide the requested services.

16 Claims, 191 Drawing figures  
Exemplary Claim Number: 1  
Number of Drawing Sheets: 133

Full	Title	Citation	Front	Review	Classification	Date	Reference			Claims	KWIC	Draw De
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☐ 6. Document ID: US 5999525 A

L9: Entry 6 of 10

File: USPT

Dec 7, 1999

US-PAT-NO: 5999525  
DOCUMENT-IDENTIFIER: US 5999525 A

TITLE: Method for video telephony over a hybrid network

DATE-ISSUED: December 7, 1999

INVENTOR-INFORMATION:

NAME	CITY	STATE	ZIP CODE	COUNTRY
Krishnaswamy; Sridhar	Cedar Rapids	IA		
Elliott; Isaac K.	Colorado Springs	CO		
Reynolds; Tim E.	Iowa City	IA		
Forgy; Glen A.	Iowa City	IA		
Solbrig; Erin M.	Cedar Rapids	IA		

US-CL-CURRENT: 370/352; 370/389, 370/392, 379/114.15, 379/90.01, 379/93.07

ABSTRACT:

Telephone calls, data and other multimedia information including video, audio and data is routed through a switched network which includes transfer of information across the internet. Users can transmit video, audio and data communications of designated quality over the internet to other registered video telephony users. Users can manage more aspects of a network than previously possible, and control network activities from a central site.

30 Claims, 190 Drawing figures

Exemplary Claim Number: 11

Number of Drawing Sheets: 134

Full	Title	Citation	Front	Review	Classification	Date	Reference			Claims	KMC	Draw. D
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☐ 7. Document ID: US 5867495 A

L9: Entry 7 of 10

File: USPT

Feb 2, 1999

US-PAT-NO: 5867495

DOCUMENT-IDENTIFIER: US 5867495 A

TITLE: System, method and article of manufacture for communications utilizing calling, plans in a hybrid network

DATE-ISSUED: February 2, 1999

INVENTOR-INFORMATION:

NAME	CITY	STATE	ZIP CODE	COUNTRY
Elliott; Isaac K.	Colorado Springs	CO		
Krishnaswamy; Sridhar	Cedar Rapids	IA		

US-CL-CURRENT: 370/352; 370/389, 370/392, 379/11, 379/115.01, 379/90.01, 379/93.07

ABSTRACT:

Telephone calls, data and other multimedia information is routed through a hybrid

network which includes transfer of information across the internet utilizing telephony routing information and internet protocol address information. A media order entry captures complete user profile information for a user. This profile information is utilized by the system throughout the media experience for routing, billing, monitoring, reporting and other media control functions. Users can manage more aspects of a network than previously possible, and control network activities from a central site. Calling card access is provided for users and supports typical calls as well as media transfers over the hybrid network including over the internet.

27 Claims, 190 Drawing figures  
Exemplary Claim Number: 19  
Number of Drawing Sheets: 132

Full	Title	Citation	Front	Review	Classification	Date	Reference			Claims	KMC	Draw D
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☐ 8. Document ID: US 5867494 A

L9: Entry 8 of 10

File: USPT

Feb 2, 1999

US-PAT-NO: 5867494  
DOCUMENT-IDENTIFIER: US 5867494 A

TITLE: System, method and article of manufacture with integrated video conferencing billing in a communication system architecture

DATE-ISSUED: February 2, 1999

INVENTOR-INFORMATION:

NAME	CITY	STATE	ZIP CODE	COUNTRY
Krishnaswamy; Sridhar	Cedar Rapids	IA		
Elliott; Isaac K.	Colorado Springs	CO		
Reynolds; Tim E.	Iowa City	IA		
Forgy; Glen A.	Iowa City	IA		
Solbrig; Erin M.	Cedar Rapids	IA		

US-CL-CURRENT: 370/352; 370/389, 370/392, 379/114.15, 379/90.01, 379/93.07

ABSTRACT:

Telephone calls, data and other multimedia information including video, audio and data is routed through a switched network which includes transfer of information across the internet. Users can participate in video conference calls in which each participant can simultaneously view the video from each other participant and hear the mixed audio from all participants. Users can also share data and documents with other video conference participants. Users can manage more aspects of a network than previously possible, and control network activities from a central site. Billing of the conference call is accomplished utilizing a billing detail record to capture events associated with a call as they occur and debit the appropriate bill.

20 Claims, 192 Drawing figures  
Exemplary Claim Number: 7  
Number of Drawing Sheets: 134

Full	Title	Citation	Front	Review	Classification	Date	Reference			Claims	KWAC	Draw D
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☐ 9. Document ID: US 5487135 A

L9: Entry 9 of 10

File: USPT

Jan 23, 1996

US-PAT-NO: 5487135

DOCUMENT-IDENTIFIER: US 5487135 A

TITLE: Rule acquisition in knowledge based systems

DATE-ISSUED: January 23, 1996

INVENTOR-INFORMATION:

NAME	CITY	STATE	ZIP CODE	COUNTRY
Freeman; Paul R. W.	Southville Bristol			GB2

US-CL-CURRENT: 706/59

ABSTRACT:

A rule-based system, concerned with a domain of knowledge or operations (the domain theory) and having associated therewith a rule-based entity relationship (ER) system (the ER theory) which represents the domain theory diagrammatically, is supported by a computer system. The system, which constructs a new rule for the domain theory, controls the entry into conditions storage memory or note pad (16) of conditions which together represent the desired rule, and rule assembly logic (17) that generates the desired rule from those entries. A display device (14) displays an ER diagram (FIG. 2) obtained from the ER theory and stored in memory (11, 12). An operator selects, via a mouse and control logic (13, 15), elements of the ER diagram. These elements are entered into the conditions storage means or note pad (16). Attributes are entered via a combination of selection from the ER diagram and semantic constraints on their values. When all elements and attributes have been so entered, they are compiled into the new rule by rule assembly logic (17) and assimilated into the domain theory by assimilator logic (18).

15 Claims, 9 Drawing figures

Exemplary Claim Number: 8

Number of Drawing Sheets: 8

Full	Title	Citation	Front	Review	Classification	Date	Reference			Claims	KWAC	Draw D
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☐ 10. Document ID: US 5469539 A

L9: Entry 10 of 10

File: USPT

Nov 21, 1995

US-PAT-NO: 5469539

DOCUMENT-IDENTIFIER: US 5469539 A

TITLE: Method for abstracting/detailing structuring elements of system

## specification information

DATE-ISSUED: November 21, 1995

## INVENTOR-INFORMATION:

NAME	CITY	STATE	ZIP CODE	COUNTRY
Usuda; Yutaka	Yokohama			JP

US-CL-CURRENT: 715/841; 345/440, 715/853

## ABSTRACT:

The specification abstracting-detailing system stores system specification information in a hierarchical structure. A hierarchy operation selects an object to be detailed or abstracted from the specification information, for updating hierarchical information of a hierarchy between specification information of the hierarchy in such a state that a logical relation of the specification information contained in the hierarchy of the object selected, and for creating or deleting a new hierarchy. This allows the abstracting and detailing to be performed in the course of a natural thinking process by a designer.

1 Claims, 12 Drawing figures

Exemplary Claim Number: 1

Number of Drawing Sheets: 11

Full	Title	Citation	Front	Review	Classification	Date	Reference			Claims	KMC	Draw D
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